DEPARTMENT OF ENERGY
FY 1999 CONGRESSIONAL BUDGET REQUEST
DEFENSE FACILITIES CLOSURE PROJECTS

PROPOSED APPROPRIATION LANGUAGE

For expenses of the Department of Energy to accelerate the closure of defense environmental management sites, including the purchase , construction and acquisition of plant and capital equipment and other necessary expenses [$890,800,000] $1,006,240,000, to remain available until expended. *(Energy and Water Development Appropriations Act, 1998.)*

EXPLANATION OF CHANGE

None.

DEPARTMENT OF ENERGY
FY 1999 CONGRESSIONAL BUDGET REQUEST
DEFENSE FACILITIES CLOSURE PROJECTS
SITE CLOSURE
(Tabular dollars in thousands, narrative in whole dollars)

PROGRAM MISSION

The SITE CLOSURE account includes funding for sites for which the Environmental Management program has established a goal of completing EM's cleanup mission by the end of FY 2006. After EM's cleanup mission is complete at these sites, no further Departmental mission is envisioned, except for limited long-term surveillance and maintenance, and the sites will be available for some alternative use. Within the Defense Facilities Closure Projects appropriation, the SITE CLOSURE account includes funding for projects under the Ohio Field Office in Ohio (i.e., Fernald Site, Mound Plant, the Ashtabula site, and the Battelle Columbus Laboratory) and the Rocky Flats Environmental Technology Site in Colorado.

In August 1997, Secretary Peña designated the Rocky Flats, Fernald, and Mound sites as pilot sites for accelerated closure. The Energy and Water Development Appropriations Act for Fiscal Year 1998 expanded the then-existing Closure account to include all funding for the Fernald and Rocky Flats sites to encourage the acceleration of the closure of these sites. In the FY 1999 budget request, the Department has included several additional Ohio sites within this account.

Consistent with Congressional intent, the SITE CLOSURE account is intended to highlight those sites where cleanup can be accelerated and substantial savings achieved by the resulting reduction in long-term program costs and ongoing support costs. By completing cleanup and other environmental management activities at these locations, outyear maintenance costs can be avoided and overall life-cycle costs reduced, thereby making more EM resources available in the outyears to support the long-term cleanup and management of the larger, more complex sites.

SITE CLOSURE - DEFENSE - PROGRAM MISSION (cont'd)

The Ohio sites managed by the Ohio Operations Office provide a good example of how sequencing of sites combined with acceleration can significantly increase site completions. The Ohio strategy is to focus activities on the larger sites where most cost savings can be obtained through acceleration (Fernald and Mound), while focusing the remaining funding on sequencing the completion of smaller sites. For example, as activities are completed at the Battelle Columbus Laboratory (BCL) King Avenue site, the funding will be allocated to the Ashtabula Environmental Project; and once this is completed, additional resources will be allocated to the BCL West Jefferson site.

DEPARTMENT OF ENERGY
FY 1999 CONGRESSIONAL BUDGET REQUEST
DEFENSE FACILITIES CLOSURE PROJECTS
SITE CLOSURE
(Dollars in thousands)

PROGRAM FUNDING PROFILE

	FY 1997 Adjusted Appropriation	FY 1998 Adjusted Appropriation	FY 1999 Budget Request
Remedial Action/Release Sites	$105,549	$126,661	$142,380
Facilities Deactivation	57,074	63,819	71,204
Facility Decommissioning	32,786	33,378	33,154
Nuclear Materials Stabilization	98,657	122,510	125,851
Landlord	414,598	488,189	463,980
Transuranic Waste	9,121	13,059	14,292
Mixed Low-Level Waste	26,610	51,177	50,114
Low-Level Waste	62,785	55,297	56,762
Hazardous Waste	435	858	3,984
Other Waste	5,537	6,456	6,314
Program Support	49,302	34,481	38,205
TOTAL, SITE CLOSURE, Defense	$862,454	$995,885	$1,006,240
Operations and Maintenance [non-add]	[$862,454]	[$995,885]	[$1,006,240]
Construction [non-add]	[$0]	[$0]	[$0]

SITE CLOSURE - DEFENSE - PROGRAM FUNDING PROFILE (cont'd)

Public Law Authorizations
Pub. Law 95-91, Department of Energy Organization Act (1977)
Pub. Law 105-62, The Energy and Water Development Appropriations Act, Fiscal Year 1998
Pub. Law 105-340, National Defense Authorization Act, Fiscal Year 1998
Pub. Law 102-579, Waste Isolation Pilot Plant Land Withdrawal Act (1992)

DEPARTMENT OF ENERGY
FY 1999 CONGRESSIONAL BUDGET REQUEST
DEFENSE FACILITIES CLOSURE PROJECTS
SITE CLOSURE
(Dollars in thousands)

PROGRAM FUNDING BY SITE

Field Offices/Sites	FY 1997 Adjusted Appropriation	FY 1998 Adjusted Appropriation	FY 1999 Budget Request
OHIO FIELD OFFICE			
Ashtabula (OH)	$16,075	$14,710	$15,405
Battelle Columbus Lab (OH)	12,405	4,745	300
Fernald Environmental Management Plant (OH)	258,675	258,700	275,347
Mound Plant (OH)	87,914	85,630	89,988
Ohio Field Office (OH)	0	0	0
Subtotal, OHIO	$375,069	$363,785	$381,040
ROCKY FLATS FIELD OFFICE			
Rocky Flats Plant (CO)	$487,385	$632,100	$625,200
Subtotal, ROCKY FLATS	$487,385	$632,100	$625,200
TOTAL, SITE CLOSURE, Defense	$862,454	$995,885	$1,006,240

SITE CLOSURE - DEFENSE

OHIO

I. Mission Supporting Goals and Objectives

MISSION

The Environmental Management (EM) Program managed through the Ohio Field Office supports activities at four sites in the State of Ohio. These sites are: the Fernald Environmental Management Project (FEMP); the Miamisburg Environmental Management Project (MEMP); the Columbus Environmental Management Project (CEMP); and the Ashtabula Environmental Management Project (AEMP) site. The Ohio Field Office manages, coordinates, tracks, and assists in the implementation of the cleanup program among the various sites. In addition, the Ohio Field Office provides for oversight activities for the State of Ohio.

2006 STRATEGY

The goal for all Ohio Field Office sites is to complete environmental restoration and waste management projects by 2005 with a minimal but adequate level of long-term stewardship. The end state for each site depends on a variety of factors, including community needs, regulatory requirements, and technical feasibility. The AEMP site will be released for unrestricted use and returned to the RMI Company; the CEMP site will be transferred to Battelle Laboratories for unrestricted use; the FEMP site will be completed and placed under institutional control; and the MEMP site will be transferred to the City of Miamisburg.

I. Mission Supporting Goals and Objectives (cont'd)

FY 1999 PROGRAM

The FEMP site encompasses approximately 1,050 acres, located 17 miles northwest of Cincinnati, Ohio. High-purity uranium metal products were produced at the FEMP site for the DOE and its predecessor agencies from 1951 to 1989. Thorium was also processed, but on a smaller scale, and is still stored on-site. Uranium processing operations at the FEMP were limited to a fenced, 136-acre tract known as the Production Area. In November 1989, the Environmental Protection Agency placed the FEMP site on the National Priorities List, and in April 1990 DOE and the Environmental Protection Agency entered into a Consent Agreement (since amended) for site remediation. The Consent Agreement created five Operable Units (OUs) covering total site remediation. The FEMP has implemented an accelerated cleanup schedule which provides for site closure with the completion of all currently established in-situ contaminant source remediation and risk mitigation activities by FY 2005. The in-situ contaminant sources for OU1, OU2, OU3, and OU5 will be removed and appropriately disposed of by FY 2005. In addition, the extraction and treatment infrastructure required to contain and mitigate risks associated with contaminated groundwater will be fully in place. Follow-up activities for FY 2006 through FY 2008 include finalization of treatment and disposal of Silos 1 and 2 wastes and structures per the OU4 Record of Decision (ROD) amendment. The FEMP will utilize technologies such as a new inorganic treatment process to treat PCB contaminated low-level and mixed low level waste (Tri-Mixed Treatment Demonstration), Oxy-gasoline torch cutting, vacuum removal of insulation materials, process piping interior inspection, and a technology demonstration project (injection of treated groundwater) that may reduce the groundwater remediation schedule from 27 to 10 years. In FY 1997, Fernald initiated construction of the on-site disposal facility and will begin placing waste in FY 1998. Key activities in FY 1999 include continued waste placement in the on-site disposal facility and shipment of OU1 waste. FEMP is in compliance with CERCLA, FFCA, RCRA, and all necessary requirements. The FEMP is comprised of seven release sites and 27 facilities. Through FY 1997, remediation of four release sites and ten facilities was completed. In FY 1998 activity is focused on the first placement of waste in the on-site disposal facility. In FY 1999, remediation of release sites and facilities will continue.

I. Mission Supporting Goals and Objectives (cont'd)

FY 1999 PROGRAM (cont'd)

The AEMP site, located in Ashtabula, Ohio, is owned and operated by the RMI Company, and is contaminated with both radiological and hazardous materials resulting from previous operations by the DOE to shape nuclear materials. The AEMP is comprised of three release sites and 25 facilities. The cleanup is to decontaminate and decommission (D&D) buildings and the remediation of contaminated soils and ground water to allow unrestricted use of the site. The AEMP goal is to achieve completion by FY 2003, with an associated reduction in cost of $39,000,000 from the costs projected in the FY 1996 Baseline Environmental Management Report. Most of the cost reduction is due to the ability to treat and reduce the volume of contaminated waste that must be shipped off-site to a disposal facility. AEMP is in compliance with Nuclear Regulatory Commission and other regulatory requirements. Upon completion the site will be released to the RMI Company. Long term groundwater pump and treat operations will continue until FY 2018.

In FY 1998, full-scale soil treatment and disposal of over 4,000 cubic meters of contaminated soil will be initiated at AEMP, and major equipment remediation will be completed. In FY 1999, over 7,000 cubic meters of contaminated soil will be processed and disposed of. Deactivation of all buildings will also be completed and the contract for demolition awarded. In FY 2000, building demolition activities will be initiated.

The CEMP is comprised of two geographic sites (King Avenue and West Jefferson) located in Columbus, Ohio. Research and development work was performed at its facilities for the DOE and its predecessors agencies. The buildings are privately-owned by Battelle Memorial Institute. The facility retains an active Nuclear Regulatory Commission license for possession of special nuclear material and is in compliance with all necessary regulatory requirements. Both sites are radioactively-contaminated and cleanup efforts are funded by both the Defense and Non-Defense accounts. The CEMP is comprised of 17 facilities, of which 11 site cleanups were completed by the end of FY 1997. Two additional completions are scheduled for FY 1998. The King Avenue site cleanup will be completed in FY 1998 and returned to the private owner. Decontamination activities at West Jefferson were initiated in FY 1998. Restoration activities at the West Jefferson site should be completed by FY 2005 and the site returned to the private owner. All activities at CEMP are in compliance with NRC and all regulatory requirements.

I. Mission Supporting Goals and Objectives (cont'd)

FY 1999 PROGRAM (cont'd)

The MEMP manages the Mound Plant, which is located on 306 acres in Miamisburg, Ohio ten miles south of Dayton. The MEMP is predominately funded from the Defense Environmental Restoration and Waste Management appropriation, but does receive some funds from the Non-Defense Environmental Management appropriation. The plant was built in the late 1940's to support research and development, testing and production activities for the Department's defense nuclear weapons complex and energy research programs. This mission continued until 1994, when those activities were transferred to the Department's facilities at the Kansas City, Los Alamos, and Savannah River sites. The Mound Plant was primarily involved with handling components for nuclear weapons which contained plutonium-238, polonium-210 and tritium and processed large quantities of various types of explosives. As a result of these past operations, the buildings, soil, and groundwater are contaminated with radioactive and hazardous chemicals. The Mound Plant is in compliance with all necessary regulatory requirements. The Mound site is comprised of 214 release sites and 96 facilities. At the beginning of FY 1997, approximately 47 percent of the release sites and 3 percent of the facilities were complete and an additional 91 release sites and 14 facilities were completed in FY 1997. In FY 1998, cleanup of 43 release sites and 20 facilities will be completed and in FY 1999, cleanup will be finished for five additional release sites and three facilities. All release sites and facilities are planned to be completed by FY 2005.

The Mound Plant is on the EPA National Priority List (NPL), and a Federal Facility Agreement (FFA) to remediate the site has been negotiated with the Ohio and U.S. Environmental Protection Agencies (EPA). In FY 1999, MEMP will continue to cleanup the buildings and soil at the site with the goal of eventual disposition of the real property by the year 2005 or earlier. The Department is working with stakeholders and regulators toward the transfer of site ownership to the Miamisburg Mound Community Improvement Corporation upon completion of required cleanup activities. A key component in completion of the site was the award of a new performance-based completion contract on October 1, 1997, which replaced the then-existing Management and Operating contract. The new contractor may accelerate Mound cleanup by approximately two years.

SITE CLOSURE - DEFENSE - OHIO (cont'd)

I. Mission Supporting Goals and Objectives (cont'd)

FY 1999 PROGRAM (cont'd)

The FY 1999 budget reflects transfer of funds from the Defense Programs to the Environmental (EM) program for the management of nuclear materials, including the Plutonium-Beryllium Neutron Source Program at Los Alamos, that are excess to national security requirements. This completes the transfer of ownership of these materials, begun in FY 1998, at the Fernald Environmental Management Project, Idaho Chemical Processing Plant, Hanford Site, Los Alamos National Laboratory, Rocky Flats Environmental Technology Site and the Savannah River Site. EM shall be responsible for planning, funding and managing all activities required for the safe and secure storage for excess national security materials until removed from the sites and disposed.

II. Funding Schedule:

Program Activity	FY 1997	FY 1998	FY 1999	$ Change	% Change
Remedial Action/Release Sites	$88,546	$108,167	$123,075	$+14,908	+14%
Facilities Deactivation	49,730	56,918	62,486	+5,568	+10%
Facility Decommissioning	23,249	23,540	25,445	+1,905	+8%
Nuclear Material Stabilization	16,493	6,999	2,135	-4,864	-69%
Landlord	83,239	79,983	83,935	+3,952	+5%
Transuranic Waste	305	154	33	-121	-79%
Mixed Low-Level Waste	9,524	10,592	4,048	-6,544	-62%
Low-Level Waste	54,460	42,379	38,241	-4,138	-10%
Hazardous Waste	212	527	3,431	+2,904	+551%
All Other Waste Types	9	45	6	-39	-87%
Program Support	49,302	34,481	38,205	+3,724	+11%
TOTAL, Ohio	$375,069	$363,785	$381,040	$+17,255	+5%

III. Performance Summary - Accomplishments: [PBS Numbers are Bracketed in the Text.]	FY 1997	FY 1998	FY 1999

Remedial Action/Release Sites [OH-AB-01, OH-FN-04, OH-FN-05. OH-FN-06, OH-FN-07, OH-FN-09; OH-MB-02, OH-MB-08]

Remedial Action activities will be performed at the Fernald, RMI, and Mound sites. Remedial activities at Fernald include four major areas: primarily, the operation and monitoring of the waste water treatment systems and well field activities; secondly the waste pit excavation, treatment, and disposal off-site of waste; thirdly, the immobilization and shipment of concentrated and treated residues; and finally, the excavation of the flyash pile and soil geotechnical investigations. Remedial activities at the RMI site will include the continuation of soil remediation through the use of a soil washing plant. The construction of this plant resulted from the excellent decontamination results found through the trial of a small scale soil washing pilot plant.

Provide for waste water treatment systems and well field activities in the South Field area at Fernald.	$32,265	$22,811	24,166

- In FY 1997, continued to operate water treatment systems ground water monitoring and the South Plume well field; initiated the Advanced Waste Water Treatment expansion; and initiated construction of the regeneration system, and sewage treatment plant.
- In FY 1998, continue to operate water treatment systems ground water monitoring and the South Plume well field; initiate construction of the South Field Extraction System Pipeline and complete the Advanced Waste Water Treatment Expansion; and continue construction of the regeneration system and complete construction of the Sewer Treatment Plant.
- In FY 1999, complete sludge removal system construction and startup; continue water treatment; complete volatile organic compound (VOC) pre-treatment facility construction and startup; and complete South Field Update construction and startup.

SITE CLOSURE - DEFENSE - OHIO (cont'd)

III. Performance Summary - Accomplishments:	FY 1997	FY 1998	FY 1999
Remedial Action/Release Sites [OH-AB-01, OH-FN-04, OH-FN-05. OH-FN-06, OH-FN-07, OH-FN-09; OH-MB-02, OH-MB-08] (cont'd)			
Conduct various assessments and remediation activities at Fernald, including; initiation of waste pits excavation, treatment, and disposal efforts to ship waste material off-site, by rail, to a permitted commercial disposal facility.	$13,308	$44,056	$48,591
• In FY 1997, initiated on-site disposal facility activities; continued safe shutdown activities; and completed thorium overpacking.			
• In FY 1998, complete on-site rail construction, off-site rail upgrade and purchase unit trains.			
• In FY 1999, initiate shipping of waste off-site for disposal.			
Remediate contaminated soils at the Fernald Site:	$12,766	$12,760	$14,780
• In FY 1997, completed excavation of Area I, Phase I.			
• In FY 1998, initiate inactive flyash pile excavation, complete south waste unit site preparation, and complete soil geotechnical investigation in former production areas.			
• In FY 1999, complete excavation of the inactive flyash pile and initiate excavation of the contaminated south field.			
Immobilize concentrated residues at the Fernald site, by waste treatment and ship treated residues off-site for disposal.	$17,761	$22,654	$30,452
• In FY 1997, completed technical assessment of treatment technologies for concentrated residues.			
• In FY 1998, complete RFP and award multi-technology proof-of-principle contract for remediation of radium-bearing residues, and complete waste retrieval project.			
• In FY 1999, award contract for remediation of thorium-bearing residues.			

III. Performance Summary - Accomplishments:	FY 1997	FY 1998	FY 1999
Remedial Action/Release Sites (cont'd)			
At the AEMP: • In FY 1997, completed the last assessment.	$143	$0	$0
Cleanup three release sites by RMI at AEMP. • In FY 1997, set up and operated the soil wash Pilot Plant; took soil samples and carried out characterization activities. • In FY 1998, provide RMI support for soil wash efforts. • In FY 1999, provide RMI support for soil wash efforts.	$4,759	$520	$486
Assess 214 release sites at Mound, of which 47 percent were completed prior to FY 1997. • In FY 1997, completed 91 assessments. • In FY 1998, complete 48 assessments. • In FY 1999, no assessments planned.	$1,509	$1,073	$0
Cleanup 214 release sites at Mound, of which 47 percent were completed prior to FY 1997. • In FY 1997, completed 91 cleanups. • In FY 1998, complete 43 cleanups. • In FY 1999, complete 5 cleanups.	$6,035	$4,293	$4,600
Subtotal, Remedial Action/Release Sites	**$88,546**	**$108,167**	**$123,075**

III. Performance Summary - Accomplishments:	FY 1997	FY 1998	FY 1999
Facilities Deactivation [OH-AB-01; OH-FN-01; OH-MB-01, OH-MB-02, OH-MB-04, OH-MB-05, OH-MB-06, OH-MB-07]			
Facility Deactivation at Fernald will include the safe shutdown of 4 major former production area buildings. Safe Shutdown activities for Fernald are scheduled to be completed by FY 2001. Deactivation includes the removal of waste in the production lines of the processing equipment. Deactivation at RMI is scheduled to include the deactivation of equipment and safe shutdown of all 25 former plant buildings by FY 1999. The Mound facility will deactivate 35 former plants through the end of FY 1999, leaving 86 buildings to be deactivated after FY 1999.			
Deactivate 121 buildings at Mound, of which none were complete prior to FY 1997.	$2,252	$10,744	$16,996
• In FY 1997, 2 building safe shutdowns completed.			
• In FY 1998, complete safe shutdown on 22 buildings.			
• In FY 1999, complete safe shutdown on 11 buildings.			
At the AEMP:	$4,130	$1,430	$1,022
• In FY 1997, conducted equipment remediation and facilities shutdown efforts.			
• In FY 1998, continue equipment remediation and facilities shutdown; extrusion press removed. Complete safe shutdown on 10 buildings.			
• In FY 1999, continue equipment remediation and facilities shutdown; all equipment removed. Complete safe shutdown on 15 buildings.			

III. Performance Summary - Accomplishments:	FY 1997	FY 1998	FY 1999
Facilities Deactivation (cont'd)			
FEMP • In FY 1997, completed Plant 5 safe shutdown, and initiated Plant 6, 8, 2, and 3 shutdown. • In FY 1998, complete Plant 2, 3, and 8 safe shutdown, and continue Plant 6 safe shutdown. • In FY 1999, complete Plant 6 safe shutdown.	$43,348	$44,744	$44,468
Subtotal, Facilities Deactivation	**$49,730**	**$56,918**	**$62,486**
Facility Decommissioning [(OH-AB-01; OH-CL-01, OH-CL-02; OH-FN-02; OH-MB-02, OH-MB-04, OH-MB-05, OH-MB-06, and OH-MB-07]			
Facility Decommissioning at Fernald will include the decommissioning of five major former production area plants and the partial decommissioning and maintenance of two major former plants. Decommission of one of these plants will include implosion in coordination with the use of hydraulic shears. Decommissioning activities at CEMP will include health and safety support, equipment removal, cleaning, and emergency preparedness. Decommissioning at CEMP includes a thorough cleaning and scrubbing of the structures. A restoration account has been set aside for the repair of the structures to their original condition. Decommissioning activities at RMI will commence in FY 1999 and continue through FY 2002.			
Carry out Decontamination and Decommissioning (D&D) projects and assessment activities at Fernald. • In FY 1997, completed Plant 4 and Phase I of Plant 1; and initiated work on the Boiler Plant and Plant 9.	$9,192	$9,206	$12,975

III. Performance Summary - Accomplishments:	FY 1997	FY 1998	FY 1999
Facility Decommissioning (cont'd)			
• In FY 1998, continue Boiler Plant and Plant 9, and initiate and complete sewage treatment plant. • In FY 1999, complete Plant 9, Boiler Plant; initiate and complete the tank farm; initiate maintenance building, Plant 3, and Plant 5.			
Conduct decontamination activities at CEMP. • In FY 1997, continued decontamination activities at the King Avenue buildings, included health and safety support, emergency preparedness, site services, public relations, quality assurance, waste management, and project management activities. • In FY 1998, complete fieldwork decontamination at the King Avenue Site; continue decontamination activities of the West Jefferson Buildings, including material and equipment removal and activities, health and safety support, emergency preparedness, silo services, public relations, quality assurance waste management, and project management activities. • In FY 1999, continue equipment removal from the hot cell building and initiate equipment and material removal from the retired reactor research facility at West Jefferson; continue necessary project support activities.	$10,632	$4,415	$300
Assess 96 Facilities at Mound, of which 7 percent were completed prior to FY 1997. • In FY 1997, completed 16 assessments. • In FY 1998, complete 21 assessments. • In FY 1999, complete 13 assessments.	$567	$2,067	$2,751

III. Performance Summary - Accomplishments:	FY 1997	FY 1998	FY 1999
Facility Decommissioning (cont'd)			
Decommission 96 facilities at Mound of which 3 percent were completed prior to FY 1997. • In FY 1997, completed 14 decommissionings. • In FY 1998, complete 20 decommissionings. • In FY 1999, complete 3 decommissionings.	$2,858	$7,852	$7,762
Conduct decommissioning activities at AEMP. • In FY 1999, carry out essential decommissioning efforts leading to initiation of building demolition in FY 2000.	$0	$0	$1,657
Subtotal, Facility Decommissioning	**$23,249**	**$23,540**	**$25,445**

Nuclear Materials Stabilization [OH-MB-01,OH-FN]

Nuclear Material stabilization projects will focus on the safe storage, processing, packaging, and off-site shipment of all stabilized nuclear material (SNM) at the Ohio Sites. This includes 3.0 kg of nuclear materials at Mound and 5700 metric tons (MTU) of low enriched, normal, and depleted uranium at Fernald. The current schedule for completing SNM shipments at Fernald show completion in FY 2000. The majority of SNM currently in inventory at Fernald needs to be shipped off-site by FY 1999 in order to achieve site closure by FY 2006. Fernald is currently maintaining facilities for storage of SNM which were previously scheduled for D&D. Mound expects shipment of the full inventory by FY 1998.

III. Performance Summary - Accomplishments:	FY 1997	FY 1998	FY 1999
Nuclear Materials Stabilization [OH-MB-01,OH-FN] (cont'd)			
Stabilize and/or make disposition ready at Mound 3.0 kg of nuclear materials of which 0.5 kg was removed prior to FY 1997.	$16,493	$3,199	$0
• In FY 1997, shipped 2.0 kg of tritium and non-tritium excess materials to DOE receiver sites.			
• In FY 1998, complete shipments of tritium and non-tritium excess materials to DOE receiver sites.			
• In FY 1999, no activity.			
The nuclear materials project at Fernald includes disposition of approximately 5,700 metric tons uranium (MTU) of low enriched, normal, and depleted uranium materials that remained after the facilities were shutdown.	$0	$3,800	$2,135
• In FY 1998, activities include safe storage of nuclear materials, sale of low enriched and normal uranium inventories, and transfer of enriched materials and depleted uranium compounds to another facility for programmatic uses.			
• In FY 1999, continue safe storage of nuclear materials on-site, and complete disposition of remaining low enriched nuclear material inventories.			
Subtotal, Nuclear Materials Stabilization	**$16,493**	**$6,999**	**$2,135**

SITE CLOSURE - DEFENSE - OHIO (cont'd)

III. Performance Summary - Accomplishments:	FY 1997	FY 1998	FY 1999
Landlord [OH-AB-02; OH-CL-03; OH-FN-08, Oh-FN-12; OH-MB-06, OH-MB-09 OH-MB-10]			
Continue base site-wide infrastructure services at Mound including industrial hygiene and safety, radiation protection, fire protection, environmental monitoring, emergency preparedness, physical security, occupational medicine, information systems, records management, utilities, maintenance, telecommunications, logistics, non-hazardous waste disposal, and other miscellaneous services.	$43,767	$50,051	$50,743
At Fernald, continue base services activities including safety and health, emergency management fire protection, radiological control, environmental monitoring in support of restoration activities, laboratory services, support projects, maintenance activities, utilities operations, water supply, sanitary sewer and sump, security and other miscellaneous activities. In FY 1999, planning, funding and management of all activities required for the safe and secure storage of nuclear materials that are excess to national security requirements is included.	$38,748	$29,602	$33,192
Provide for S&M activities at the West Jefferson North Site at CEMP. • In FY 1997, provided required core environmental S&M activities, including facility structural/hazard analysis of major building systems. • In FY 1998, provide required core environmental S&M activities, including facility structural/hazard analysis of major building systems. • In FY 1999, no activity.	$724	$330	$0
Subtotal, Landlord	**$83,239**	**$79,983**	**$83,935**

III. Performance Summary - Accomplishments:	FY 1997	FY 1998	FY 1999
Waste Activities			
The Ohio waste management activities include support of the treatment, storage, and disposal of all wastes currently in the inventory and projected to be generated from other remediation closure projects. Specific waste types include: low-level waste (LLW), mixed low-level waste (MLLW), transuranic (TRU) waste, transuranic mixed (TRM) waste, hazardous waste, and other sanitary/uncontaminated waste. Previous disposal of MLLW has resulted in significant reductions, and Ohio is nearing completion of disposal in FY 1999. Forty percent of Mound MLLW inventory is scheduled for off-site shipment by the end of FY 1999. LLW disposal will be an ongoing waste stream at most Ohio sites due to generation from soil excavation and remediation activities. TRU wastes are found at the Mound and CEMP Lab in relatively small quantities (less than 1000 m3). Both sites are awaiting an interim or final receiver site. Hazardous waste and sanitary waste streams are managed at all Ohio sites and are ongoing waste streams. The metrics below detail the cubic meters of waste disposed of off-site**.**			
Transuranic Waste	$305	$154	$33
Continue storage of TRU waste (247 m^3 total to be generated) at Mound until interim off-site storage facility can be found. [OH-MB-03]			
Storage • In FY 1997, 247 cubic meters were stored. • In FY 1998, 247 cubic meters will be stored. • In FY 1999, 0 cubic meters will be stored.			
Subtotal, Transuranic Waste	**$305**	**$154**	**$33**

SITE CLOSURE - DEFENSE - OHIO (cont'd)

III. Performance Summary - Accomplishments:	FY 1997	FY 1998	FY 1999
Mixed Low-Level Waste	$9,524	$10,592	$4,048
Dispose off-site of Ohio's MLLW (1,600 m^3 total to be generated). Significant reductions in FY 1999 because contracts were entered into in FY 1998. [OH-FN-10, OH-MB-03, OH-AB-01, OH-CL-02]			
Disposal • In FY 1997, 494 cubic meters were disposed. • In FY 1998, 1,561 cubic meters will be disposed. • In FY 1999, 6,658 cubic meters will be disposed.			
Subtotal, Mixed Low-Level Waste	**$9,524**	**$10,592**	**$4,048**
Low-Level Waste			
Dispose of Mound's LLW (89,692 m^3 total to be generated) off-site. [OH-MB-03]	$10,860	$4,083	$3,326
Disposal • In FY 1997, 25,410 cubic meters were disposed. • In FY 1998, 15,563 cubic meters will be disposed. • In FY 1999, 8,864 cubic meters will be disposed.			
Provide for disposition of low-level waste at Fernald. • In FY 1997, processed and disposed of 17,379 m^3 of waste; completed Thorium Overpacking Project and shipment of all overpacked containers. • In FY 1998, process and dispose of 4,226,484 m^3 of waste. • In FY 1999, continue shipping waste as generated; complete uranium residue operations; complete Chemical Treatment Project.	$20,763	$15,113	$14,547

III. Performance Summary - Accomplishments:	FY 1997	FY 1998	FY 1999
Low-Level Waste (cont'd)			
Provide for LLW treatment and disposal at the AEMP. • In FY 1997, processed (1,535 m^3) and remediated major equipment and components; disposed of contaminated equipment and debris at an off-site facility (927 m^3). • In FY 1998, continue to process (608 m^3) and remediate equipment; wash/treat Area D, C, and C-West soils; continue disposal of contaminated equipment, debris and soil at an off-site facility (5,314 m^3). • In FY 1999, continue to wash/treat soils and process debris and continue disposal of contaminated equipment, debris and soil at an off-site facility (9,790 m^3).	$1,120	$7,850	$7,108
Provide for soil excavation/remediation at Fernald • In FY 1997, initiated soil remediation in Area 1 and manage soil stock piles. • In FY 1998, continue excavation/remediation of Area 1; initiate characterization/ remediation of Area 2; and manage soil stockpiles. • In FY 1999, continue characterization/excavation of Areas 1 and 2.	$21,717	$15,333	$13,260
Treatment efforts at Fernald • In FY 1997, 4,188,208 cubic meters were treated. • In FY 1998, 4,188,208 cubic meters will be treated. • In FY 1999, 4,227,075 cubic meters will be treated.			
Storage at Fernald • In FY 1997, 25,375 cubic meters were stored. • In FY 1998, 125,132 cubic meters will be stored. • In FY 1999, 111,764 cubic meters will be stored.			

III. Performance Summary - Accomplishments:	FY 1997	FY 1998	FY 1999
Low-Level Waste (cont'd)			
Disposal • In FY 1997, 17,379 cubic meters were disposed. • In FY 1998, 4,226,484 cubic meters will be disposed. • In FY 1999, 4,416,349 cubic meters will be disposed.			
Subtotal, Low-Level Waste	**$54,460**	**$42,379**	**$38,241**
Hazardous Waste [OH-MB-02, OH-MB-03, OH-MB-04, OH-MB-05, OH-MB-06, OH-MB-07]	$212	$527	$3,431
Dispose of Mound's hazardous waste off-site (2,399 m^3 to be generated). Disposal • In FY 1997, 64 cubic meters were disposed. • In FY 1998, 159 cubic meters will be disposed. • In FY 1999, 1,037 cubic meters will be disposed.			
Subtotal, Hazardous Waste	**$212**	**$527**	**$3,431**

The Ohio performance measure accomplishments reflected in these tables include Environmental Restoration (ER) Program-generated waste which was not included in the Ohio section of the EM FY 1997 year-end Quarterly Management Review (QMR).

III. Performance Summary - Accomplishments:	FY 1997	FY 1998	FY 1999
All Other Waste Types			
Dispose of Mound's sanitary waste off-site (41,076 m^3 total to be generated).	$9	$45	$6
Disposal • In FY 1997, 805 cubic meters were disposed. • In FY 1998, 4,132 cubic meters will be disposed. • In FY 1999, 518 cubic meters will be disposed.			
Subtotal, All Other Waste Activities	**$9**	**$45**	**$6**
Program Support			
Continue project management activities; including conduct of operations, public affairs, quality assurance, legal affairs, finance, contracts and acquisitions, construction management, engineering management, project and information control, human resources and administration functions, and regulatory oversight at Fernald. (OH-FN-12)	$42,338	$29,601	$33,193
Provide program management support, including engineering management, regulatory oversite, and contracts and acquisitions at AEMP. (OH-AB-02)	$5,923	$4,880	$5,012
Provide program management support, including public affairs, regulatory compliance, quality assurance, project management at CEMP. (OH-CL-03)	$1,041	$0	$0
Subtotal, Program Support	**$49,302**	**$34,481**	**$38,205**
TOTAL, OHIO	**$375,069**	**$363,785**	**$381,040**

Explanation of Funding Changes From FY 1998 to FY 1999:

Remedial Action/Release Sites: Increase due to additional number of release sites to be assessed and cleaned up, initiation of shipment of OU1 material, and increased waste placement in Fernald on-site disposal facility.	$+14,908
Facility Deactivation: Increase due primarily to rebaselining of work at the Mound Plant for accelerated work to achieve earlier site closure date.	$+5,568
Facilities Decommissioning: Increase due to acceleration in number of facilities to be assessed and cleaned up, such as initiation of Fernald Tank Farm, Plant 3, and Plant 5 complexes and maintenance plant D&D.	$+1,905
Nuclear Materials Stabilization: Decrease due primarily to completion of shipments of all accountable tritium and non-tritium excess materials at Mound in FY 1998.	$-4,864
Landlord: Increase due mainly to support for acceleration of Safe Shutdown, D&D, Waste Pits and other remediation activities at Fernald for FY 1999.	$+3,952
Waste Activities: Decrease is due primarily to the reduction in the cost of disposing of LLW and MLLW from Ohio sites.	$-7,938
Program Support: Increase due to additional program management needed to support acceleration of facility decommissioning and waste management at Fernald and AEMP.	$+3,724
Total Funding Change, Ohio	**$+17,255**

SITE CLOSURE FUND - DEFENSE

ROCKY FLATS

I. Mission Supporting Goals and Objectives

MISSION

The Rocky Flats Environmental Technology Site (RFETS) is located 16 miles northwest of Denver, Colorado. The site comprises approximately 11 square miles including a buffer zone. The site, which includes former nuclear weapons-related production facilities, was used to shape plutonium and uranium, fabricate alloy, and operate conventional metal production processes. When operations ceased, large amounts of plutonium, plutonium compounds, and metallic residues remained in the production lines, tanks, and process furnaces at various facilities at the site. Significant volumes of hazardous and radioactive waste generated during production operations were also present throughout numerous buildings. In addition, both hazardous and radioactive contamination exists in the site soil, sediments, and groundwater. With the discontinuation of nuclear weapons component production at Rocky Flats and relocation consolidation of non-nuclear production activities at other sites, Rocky Flats' current mission is to manage the site waste and materials, and to clean up and convert the site to beneficial use in a manner that is safe, environmentally and socially responsible, physically secure, and cost-effective.

CLOSURE STRATEGY

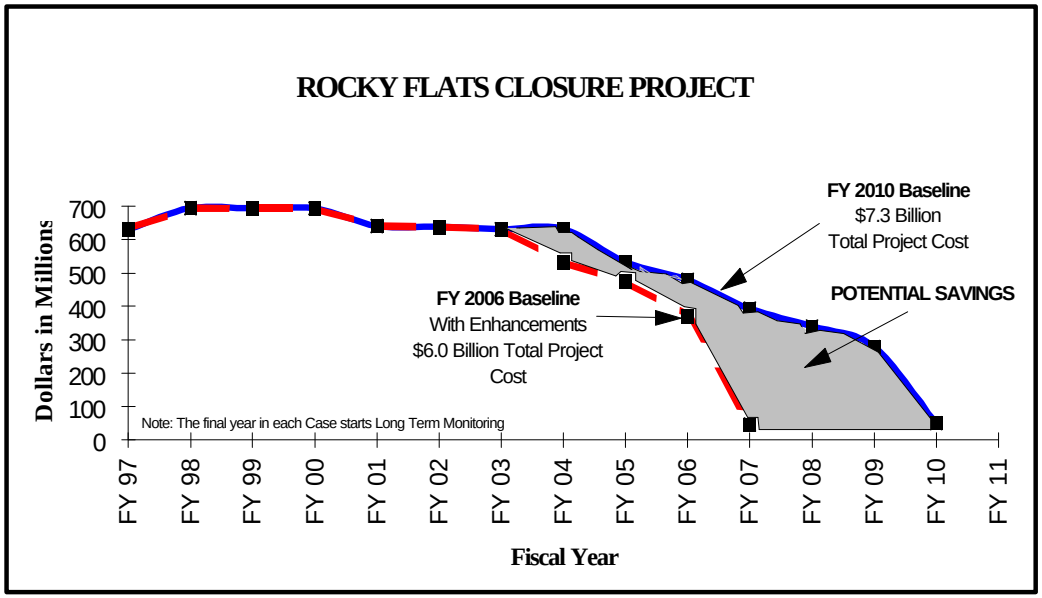
Viewing closure of the site as a collection of major projects is a significant shift in the way of doing business at Rocky Flats. Previously, planning work at the site was generally organized into the following programmatic categories: Special Nuclear Materials (SNM) Management; Environmental Restoration; Waste Management; Decontamination and Decommissioning (D&D); and Infrastructure Management. This program focus still exists in limited forms at the site. However, as site projectization continues, the focus of the work planning and implementation will continue to shift to individual projects and away from the functional departmental structure. Projectization is intended to focus management attention on accomplishing measurable progress towards site closure. Progress metrics have been established for critical projects and are included in Section III of this submittal. These metrics establish quantitative annual targets (as a percentage of the total life cycle project requirements) from which contractual performance measures will be developed and tracked to assess progress toward site closure. The project approach reinforces the commitment to accelerate the cleanup of Rocky Flats by implementation of with a measurable and cost-effective program.

I. Mission Supporting Goals and Objectives (cont'd)

CLOSURE STRATEGY (cont'd)

The current Life-Cycle Baseline (LCB) for Rocky Flats results in site closure by FY 2010 at a total project cost of $7.3 Billion. The site baseline provides the detailed cost, scope, schedule, and critical path to achieve site closure by FY 2010. The details of this baseline are embodied in the Rocky Flats Accelerating Cleanup: Focus on 2006 Plan, which contains 29 projects (24 active projects in FY 1999) that are described in Project Baseline Summaries (PBSs).

Secretary Peña has challenged the Department staff and contractors to achieve accelerated site closure by FY 2006. The estimated total project cost of this accelerated closure is $6.0 Billion (See figure 1 below).



I. Mission Supporting Goals and Objectives (cont'd)

CLOSURE STRATEGY (cont'd)

The critical path of work activities to support the closure of Rocky Flats by 2010 requires:

- Stabilization of SNM and residues
- Off-site shipment of SNM and stabilized residues
- Deactivation of plutonium buildings once the SNM is removed
- Demolition of buildings as soon as possible after completion of deactivation
- Shipment of transuranic (TRU) waste to the Waste Isolation Pilot Plant (WIPP) beginning in FY 1998
- Treatment and shipment of low-level waste (LLW) and mixed low-level waste (MLLW) throughout the closure activities
- Remediation of contaminated sites as they become available

Much of the described critical path is sequential, i.e., work activities later on the critical path can not be initiated before the earlier activities are completed. It is critical that the stabilization and deactivation activities are supported in order to free up funds for later year work (mortgage reduction).

The site has developed an FY 2010 baseline and the critical path points to a number of opportunities that would accelerate the closure of Rocky Flats to FY 2006. The FY 2010 baseline schedule assumes that plutonium metals and oxides will be stabilized, placed in DOE-STD-3013 containers and shipped to a receiver site from FY 2002-FY 2004, consistent with the Record of Decision for the *Storage and Disposition of Weapons-Usable Fissile Material Programmatic Environmental Impact Statement*. To achieve cleanup by FY 2006, plutonium metals and oxides must be removed from the site by FY 2002. The accelerated movement of materials provides for significant mortgage reduction savings in security and nuclear safety costs, and allows the decommissioning of the nuclear facilities to begin 2 years earlier. The Department is considering significant facility modification at the Savannah River Site (pending a NEPA decision) in order to accommodate this transfer. Hence, the activities and budget at the Savannah River Sites is part of the critical path at RFETS. The current baseline also assumes that plutonium residues will be stabilized, certified, and shipped to the WIPP by FY 2004. The Department is actively pursuing options that would permit the accelerated removal of plutonium metals and oxides from Rocky Flats. Residue stabilization activities are on the critical path for site closure, and the removal of these materials from the site by FY 2002 will provide for even further mortgage reduction savings in addition to the removal of metals and oxides. Environmental Management is currently pursuing opportunities, where appropriate, to waive or increase, the Safeguards Termination Limits on the material being sent to WIPP, thereby eliminating some unnecessary stabilization requirements and expediting the shipments of waste to WIPP. The third opportunity for accelerating site closure from FY 2010 to FY 2006 focuses on facility decommissioning. The current baseline assumes that major nuclear facilities

I. Mission Supporting Goals and Objectives (cont'd)

CLOSURE STRATEGY (cont'd)

decommissioning can take 5 to 7 years, and these activities dominate the later part of the site critical path schedule. During FY 1998 and FY 1999, the site is planning the decommissioning of the Building 779 Cluster, a former plutonium production facility, to not only improve the cost and schedule estimates for the decommissioning effort, but to examine technologies to accelerate the overall closure schedule.

FY 1999 PROGRAM

Special Nuclear Material (SNM) stabilization projects will focus on the safe storage, processing, packaging, and off-site shipment of all SNM at Rocky Flats. This includes 2,670 containers of plutonium metals and oxides, 103,420 kilograms of plutonium residues, and approximately 24,000 liters of plutonium solutions. The current schedule for completing SNM shipments shows completion in FY 2004. All SNM currently in inventory at Rocky Flats needs to be shipped off-site by FY 2002 in order to accelerate site closure to FY 2006. The deactivation program will focus only on major plutonium and industrial facilities that would benefit from significant mortgage reduction or that require deactivation in preparation for decommissioning activities.

I. Mission Supporting Goals and Objectives (cont'd)

FY 1999 PROGRAM (cont'd)

Figures 2, 3, and 4 show the annual and life cycle metrics planned for stabilization of plutonium solutions, stabilization of residues, and off-site shipment of SNM identified in the FY 2010 baseline. By the end of FY 1999, the Plutonium Liquid Stabilization Project will be completed, the Residue Stabilization Project will have stabilized 48 percent of the life cycle requirement, and 51 percent of the shipments in the SNM Shipping Project will be complete.

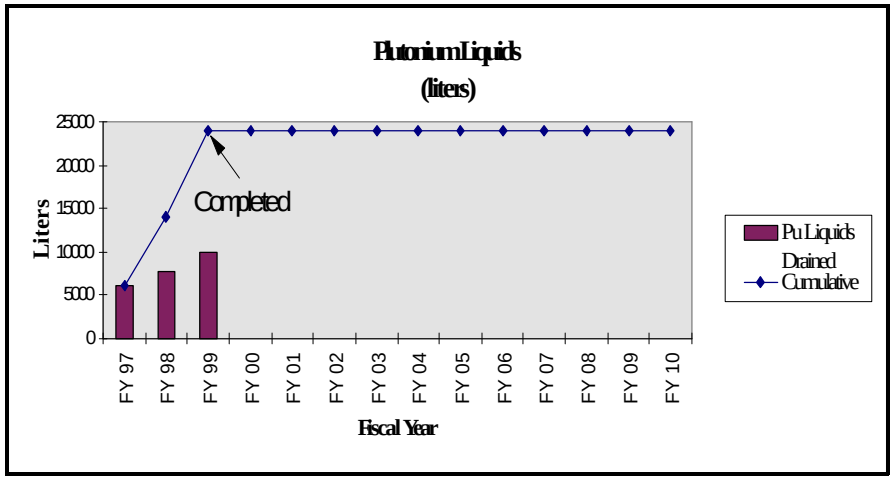


Figure 2

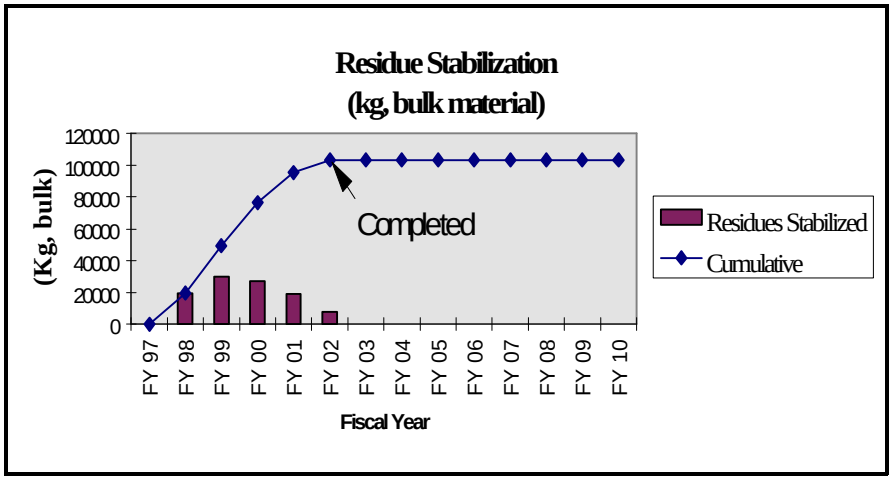


Figure 3

I. Mission Supporting Goals and Objectives (cont'd)

FY 1999 PROGRAM (cont'd)

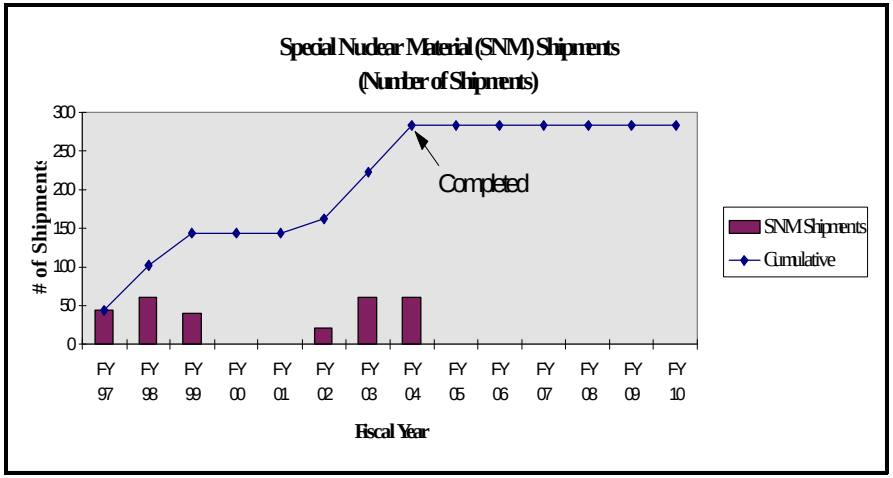


Figure 4

The Waste Management Project will focus on safe, compliant, and cost-effective waste minimization, storage, treatment, and disposal of low-level (LLW), mixed low-level (MLLW), TRU, mixed TRU, hazardous, and sanitary waste. The project's near-term goals involve continuing treatment of hazardous and sanitary waste, off-site shipment and disposal of low-level waste, off-site treatment and disposal of mixed low-level waste, development of treatment capacity for mixed waste, and characterization and certification of TRU and mixed TRU waste, and initiation of shipments for disposition at WIPP in FY 1998.

I. Mission Supporting Goals and Objectives (cont'd)

FY 1999 PROGRAM (cont'd)

Figures 5 and 6 show annual and life cycle progress for shipments of LLW/MLLW and TRU wastes. By the end of FY 1999, it is planned to complete shipment of 14 percent of the total life cycle volume of LLW/MLLW and 13 percent of the total life cycle volume of TRU waste. These are the current best estimates of waste volumes, but are subject to change as stabilization, deactivation, demolition and remediation activities are executed.

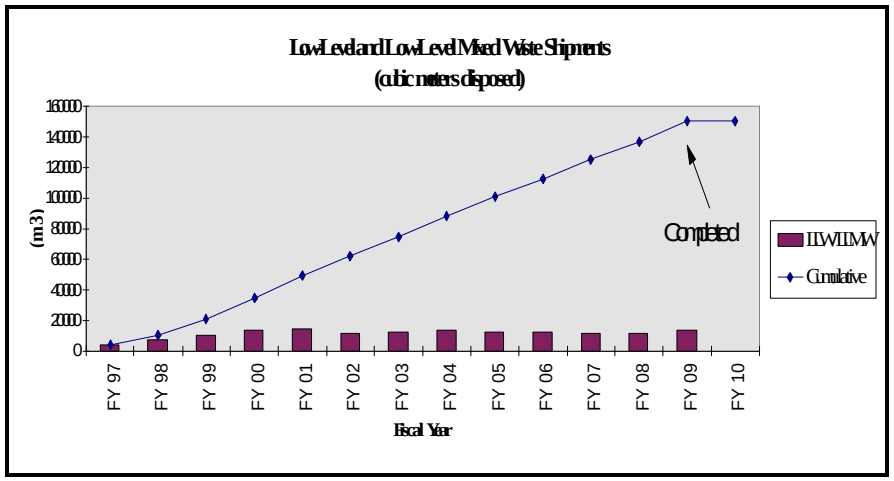


Figure 5

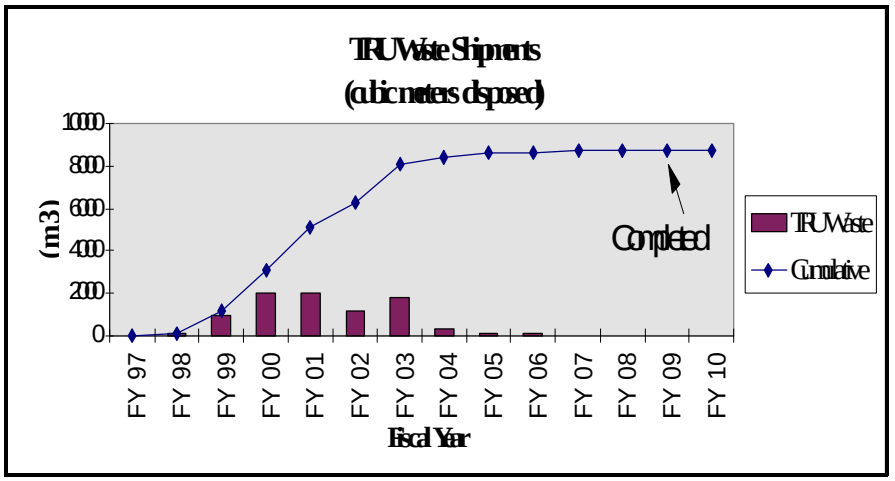


Figure 6

I. Mission Supporting Goals and Objectives (cont'd)

FY 1999 PROGRAM (cont'd)

The Rocky Flats Environmental Restoration activities will clean up a total of 58 release sites and decommission 686 facilities and buildings over the life of the site cleanup project. The designated release sites were originally grouped into 16 Operable Units (OUs), three of which have been closed through No Further Action Record of Decisions. Under the Rocky Flats Cleanup Agreement, signed July 19, 1996, most of the remaining OUs have been grouped into two, the Industrial Area and the Buffer Zone. OUs 1, 3, 5, 11, 15 and 16 will have separate Records of Decision because they were either completed or nearly complete at the time the agreement was signed. Figure 7 shows the life cycle progress for release sites planned for remediation. Limited remediation is planned for the early years of site closure since many sites are unavailable for remediation. By the end of FY 1999, approximately 16 percent of the anticipated site remediations are planned to be completed.

Figure 8 below shows the schedule and annual targets for facility decommissioning under the FY 2010 baseline. The Site has developed an innovative approach toward facility decommissioning which evaluates the building clusters as cleanup projects. These Building Cluster Closure Projects tailor the deactivation and decommissioning activities and schedules with building landlord and stabilization activities to maximum greater mortgage reduction and risk reduction. Building 779 will be completely decommissioned by the end of FY 1999 and will serve as the pilot project for nuclear facility decommissioning for the site. From this project, valuable lessons will be learned that will help expedite and improve the decommissioning of the other major nuclear facilities at the site.

I. Mission Supporting Goals and Objectives (cont'd)

FY 1999 PROGRAM (cont'd)

In FY 1999, the Department will divide responsibility for obtaining and maintaining contractor security clearances. The Office of Security Affairs funded from the Energy Water and Development appropriation, Other Defense Activities, which has been responsible for funding all contractor and Federal security clearances in previous years, will budget only for Federal employees at Headquarters and the field, in addition to Headquarters contractor clearances. Therefore, field/operations offices are responsible for funding their contractor workforce clearances. This change in policy will enable program managers to make decisions as to how many and what level of clearances are necessary for effective program management.

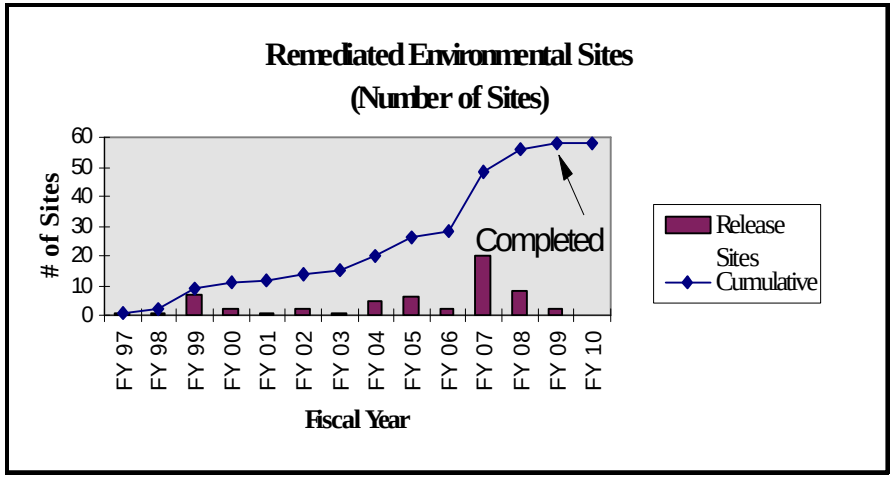


Figure 7

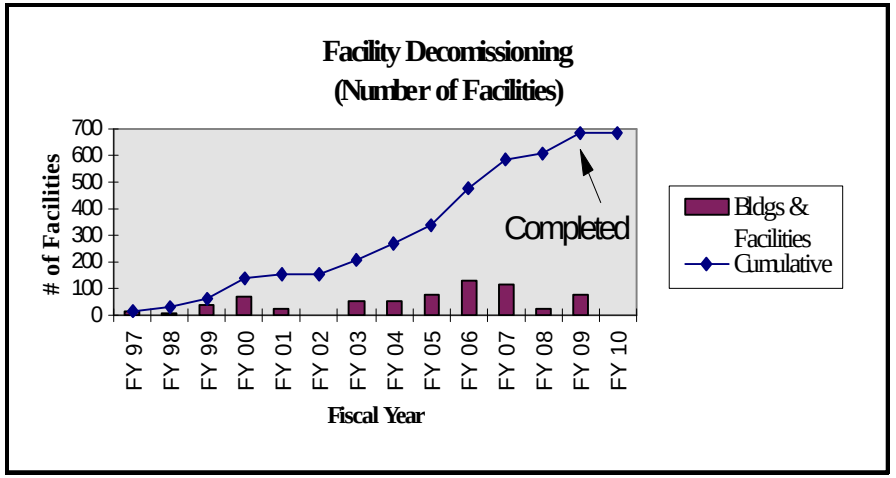


Figure 8

SITE CLOSURE - DEFENSE - ROCKY FLATS (cont'd)

I. Mission Supporting Goals and Objectives (cont'd)

FY 1998 PROGRAM (cont'd)

The FY 1998 appropriation for Defense Facility Closure provided an additional $44 million over the Environmental Management request for cleanup activities. These funds support the transfer of scope from Defense Programs to the Environmental Management program for the management of National Security material and nuclear materials that are excess to National Security requirements. The FY 1999 budget contains $42.2 million to support this activity.

II. Funding Schedule:

Program Activity	FY 1997	FY 1998	FY 1999	$Change	% Change
Remedial Action/Release Sites	$ 17,003	$ 18,494	$ 19,305	+811	+4%
Facility Decommissioning	9,537	9,838	7,709	-2,129	-22%
Facilities Deactivation	7,344	6,901	8,718	+1,817	+26%
Nuclear Materials Stabilization	82,164	115,511	123,716	+8,205	+7%
Landlord	331,359	408,206	380,045	-28,161	-7%
Transuranic Waste	8,816	12,905	14,259	+1,354	+10%
Mixed Low Level Waste	17,086	40,585	46,066	+5,481	+14%
Low Level Waste	8,325	12,918	18,521	+5,603	+43%
Hazardous Waste	223	331	553	+222	+67%
Other Waste	5,528	6,411	6,308	-103	-2%
TOTAL, Rocky Flats	$487,385	$632,100	$625,200	-6,900	-1%

III. Performance Summary - Accomplishments:
[PBS Numbers are Bracketed in the Text]

	FY 1997	FY 1998	FY 1999
Remedial Action/Release Sites [RF 001] Remedial action activities are included within the Buffer Zone Closure Project which consists of 58 release sites. This project includes: operation of groundwater and surface water monitoring stations; design, construction, and operation of groundwater containment and treatment systems; remediation of Individual Hazardous Substance Sites/Potential Area Contamination (IHSSs/PAC); continuing landlord functions for the Building 130 cluster; and operation of the firing range.	$ 17,033	$ 18,494	$ 19,305

III. Performance Summary - Accomplishments:

	FY 1997	FY 1998	FY 1999
Remedial Action/Release Sites (cont'd)			
• In FY 1997:			
- Completed remediation of 1 (1.7 percent) release site and 5 assessments.			
- Completed source removal and treatment of Mound Site (IHSS 113)			
• In FY 1998:			
- Complete remediation of 1 (1.7 percent) release site and 6 assessments.			
- Remediate Trench T-1 (IHSS 108)			
• In FY 1999:			
- Complete remediation of 7 (12.1 percent) release sites and 1 assessment.			
- Remediate Property Utilization and Disposal (PU&D) yard, B-1 dam hot spot, Mound plume, 903 Pad/Ryan's Pit plume, East Trenches plume, and Solar Pond plume.			
Subtotal, Remedial Action/Release Sites	**$ 17,003**	**$ 18,494**	**$ 19,305**
Facility Decommissioning [Portions of RF014, RF015, RF022]			
Facility decommissioning is planned and executed as one element of the Building Cluster Closure Projects at Rocky Flats. Depending on the size, complexity, and planned activities within a building, decommissioning may occur in phases in certain areas or modules of a facility in order to help reduce certain risks and building mortgages. For budget and reporting purposes the decommissioning work element has been broken out from the Building Closure Projects in order to provide and track a meaningful metric for site closure. For the metrics stated below, although certain facilities may be partially decommissioned, they will not be considered decommissioned until that point when the facility has been completely decommissioned. Each facility at the site is counted as one unit regardless of the size, cost, or technical complexity of the decommissioning. There are a total of 686 facilities at the site.	$ 9,537	$ 9,838	$ 7,709

III. Performance Summary - Accomplishments:

	FY 1997	FY 1998	FY 1999
Facility Decommissioning (cont'd)			
• In FY 1997: - 19 facilities (2.8 percent) were decommissioned. - Completed decommissioning of Buildings 980, 968, 965, 661, and 675, in addition to 14 trailers in the T690, T444, and T371 clusters. • In FY 1998: - 8 facilities (1.2 percent) will be decommissioned. - Complete decommissioning of Buildings 123, 123S, 113, and 114, in addition to 4 trailers in the T891 Cluster. Accomplish significant decommissioning in the Building 779 Cluster. • In FY 1999: - 39 facilities (5.7 percent) will be decommissioned. - Complete decommissioning of the Building 779 Cluster (24 facilities and structures) and the Building 886 Cluster (8 facilities and structures), in addition to 7 facilities and structures in the Industrial Zone Closure Project.			
Subtotal, Facility Decommissioning	**$ 9,537**	**$ 9,838**	**$ 7,709**
Facilities Deactivation [Portions of RF-014, RF-015, RF-018, RF-019, RF-022] Similar to the decommissioning element, deactivation is one element of the Building Cluster Closure Projects. The schedule for facility deactivation is dependent upon cessation of operations and is tailored to maximize mortgage reduction while safely and expeditiously preparing the facilities for decommissioning. For the metrics stated below, although certain facilities may be partially deactivated, they will not be considered deactivated until that point when the facility has been completely deactivated.	$ 7,344	$ 6,901	$ 8,718

III. Performance Summary - Accomplishments:

	FY 1997	FY 1998	FY 1999
Facilities Deactivation (cont'd)			
• In FY 1997: - 31 facilities were deactivated, which included the Building 779 Cluster and the Building 886 Cluster. • In FY 1998: - No facility deactivations will have been completed. Significant deactivation activity will be conducted in the Building 771 Cluster. • In FY 1999: - No facility deactivations will have been completed. Building 771 will be substantially deactivated and deactivation will be ongoing in the Building 776/777 Cluster and the Building 444 Cluster.			
Subtotal, Facilities Deactivation	**$ 7,344**	**$ 6,901**	**$ 8,718**
Nuclear Materials Stabilization			
The liquid stabilization project is planned to be completed by the end of FY 1999. Liquid stabilization involves the removal of 23,925 liters of plutonium liquid from tanks, piping, and other containers stored in Buildings 371, 559, 771, 776/7, and 779; processing of the liquids to convert them to various forms for safe interim storage; mitigation of hydrogen in tanks; and mixed residue Resource Conservation and Recovery Act tank closure. [RF-010]	$ 10,470	$ 16,567	$ 13,404

III. Performance Summary - Accomplishments:

	FY 1997	FY 1998	FY 1999
Nuclear Materials Stabilization (cont'd)			
• In FY 1997: - Drained 6,190 liters (25.9 percent) of plutonium liquid. • In FY 1998: - Drain 7,735 liters (32.3 percent) of plutonium liquid. - Complete draining 4 high level tanks in Building 771 by 12/31/97; complete removal of all liquids in Building 771 by 9/3/98; complete processing liquids from Building 771 high level tanks and bottles by 7/31/98. • In FY 1999: - Drain remaining 10,000 liters (41.8 percent) of plutonium liquid in Building 371 (project completed). - Liquids from Building 371 tank draining will be treated in the Caustic Waste Treatment System by June 1999.			
Stabilize 103,420 kilograms (kgs) of plutonium-bearing residue material, i.e., salt residues; sand, slag, and crucible; graphite fines; incinerator ash; fluoride residues; and, combustibles to facilitate the formal declaration of this material as TRU waste; package it for interim storage and final disposal, resolve the safeguards protection requirements for the material; and ship the material to WIPP for final disposal. [RF-009]	$38,704	$68,077	$87,059
• In FY 1997: - No stabilization occurred. Finished construction of salt pyro-oxidation processing line.			

III. Performance Summary - Accomplishments:

	FY 1997	FY 1998	FY 1999
Nuclear Materials Stabilization (cont'd)			
• In FY 1998: - Stabilize 19,550 kgs (18.9 percent) of bulk residues to include: -- 3,600 kgs pyro-oxidation of salts will be completed. -- 2,700 kgs sand, slag, and crucible will be repackaged. -- 950 kgs graphite fines will be stabilized. -- 6,800 kgs dry repackaging will be completed. -- 5,500 kgs combustibles will be stabilized. • In FY 1999: - Stabilize 29,820 kgs (28.8 percent) of bulk residues to include: -- 6,700 kgs pyro-oxidation of salts will be completed. -- 600 kgs sand, slag, and crucible will be repackaged. -- 7,800 kgs incinerator ash will be stabilized. -- 400 kgs salts will be shipped to LANL. -- 120 kgs fluoride will be shipped to Savannah River. -- 8,700 kgs dry repackaging will be completed. -- 5,500 kgs combustibles will be stabilized.			
The Plutonium Metals and Oxides Stabilization Project supports the packaging of all material greater than 50 weight percent plutonium per the requirements of DOE-STD-3013, for interim storage at RFETS for eventual off-site disposition. [RF-008]	$ 5,832	$ 9,791	$ 13,260
• In FY 1997: - Inspected and brushed 254 plutonium metal items, thermally stabilized nearly 120 kgs of plutonium oxide, and initiated construction and utility modifications in Module J of Building 707 to support installation of the plutonium Stabilization and Packaging System (SPS).			

III. Performance Summary - Accomplishments:

	FY 1997	FY 1998	FY 1999
Nuclear Materials Stabilization (cont'd)			
• In FY 1998: - Accept SPS system, perform post-acceptance testing, install the SPS in Building 707, train operators, and prepare for readiness assessment. • In FY 1999: - Begin operation of the SPS and repackage 470 containers (17.6 percent) of 2,670 containers.			
The Special Nuclear Material Shipping Project includes pits, enriched uranium, composite parts, metal and oxide in 3013 containers, and other types of material. This project element supports all activities necessary to ensure the availability of off-site shipping containers, procedure development, crimping and sealing of pits for long-term storage, and packaging and shipping of a limited amount of equipment to be sent to the Los Alamos National Laboratory to support the Stockpile Reliability Evaluation Program. The near-term shipments (143 shipments during FY 1997-FY 1999) involve shipment of pits to Pantex and enriched uranium to Oak Ridge. The outyear shipments (140 shipments during Fy 2002-FY 2004) include the shipment of metal and oxides off-site (potentially to Savannah River pending National Environmental Policy Act decision). The SNM Shipping Project supports a total of 283 shipments off-site. [RF-012]	$ 1,470	$ 5,666	$ 2,320
• In FY 1997: - Completed 43 shipments (15.2 percent) of SNM. Most of the activities under this project were funded by Defense Programs in FY 1997. • In FY 1998: - Complete 60 shipments (21.2 percent) of SNM. • In FY 1999: - Complete 40 shipments (14.1 percent) of SNM.			

III. Performance Summary - Accomplishments:

	FY 1997	FY 1998	FY 1999
Nuclear Materials Stabilization (cont'd)			
The Special Nuclear Material (SNM) Consolidation Project manages the intra-site transport of plutonium metals, oxides, and residues between facilities as necessary for mortgage reduction and interim storage and staging of these materials for processing or off-site shipment. This project includes consolidation of SNM from other facilities into Building 371, and tracking and closure of plutonium and enriched uranium Environmental Safety and Health (ES&H) vulnerabilities. [RF-006]	$ 6,150	$ 5,245	$ 4,297

- In FY 1997:
  - Completed removal of packaged SNM from Vault 152 in Building 776 and deactivated the vault.
  - Completed removal of packaged Category I and II SNM from 3 vaults in Building 771 and deactivated those vaults.
  - Began maintenance upgrades to the Stacker/Retriever vault and vehicles in Building 371.
- In FY 1998:
  - Remove all 172 nuclear residue and waste drums from Building 771 Annex.
  - Remove all SNM from 3 vaults in Building 777 and deactivate the vaults.
  - Complete maintenance upgrades on the Stacker/Retriever.
- In FY 1999:
  - Remove SNM Category I and II holdup from Building 771.
  - Empty remaining vaults in Building 777 and deactivate the vaults.

The Special Nuclear Material (SNM) Capital Support Project contains two subprojects. The Building 371 upgrade subproject responds to Defense Nuclear Facilities Safety Board Recommendation 94-3 for facility upgrades to withstand defined seismic events. The SNM support subproject provides capital and General Plant Project (GPP) upgrades to facilities or projects within the nuclear production area. [RF-004]	$ 6,578	$ 8,120	$ 3,253

III. Performance Summary - Accomplishments:

	FY 1997	FY 1998	FY 1999
Nuclear Materials Stabilization (cont'd)			
• In FY 1997: - Completed High Efficiency Particulate Air (HEPA) filter plenum demister upgrades, combustible loading control program, subsurface drain system upgrades, and egress route upgrades, and repaired and replaced fire doors in Building 371. • In FY 1998: - Complete attic pipe seismic bracing; penetrations for Room 3206 fire walls; heating, ventilation, and air conditioning system seismic upgrades; plenum deluge system modifications; SNM storage rack modifications; lightning protection system upgrades; inspect and upgrade vault fire walls; and begin cooling tower replacement. • In FY 1999: - Complete cooling tower replacement and upgrade exterior and Stacker/Retriever fire walls in Building 371.			
The International Atomic Energy Agency (IAEA) Project provides support for IAEA inspectors to perform annual inventories, monthly inspections, and nondestructive measurements for that portion of material at Rocky Flats under international safeguards. [RF-005]	$ 175	$ 148	$ 123
• In FY 1997, hosted 12 monthly inspections including Plutonium Inventory Verification. • In FY 1998, will host 12 monthly inspections including Plutonium Inventory Verification. • In FY 1999, will host 12 monthly inspections including Plutonium Inventory Verification.			

III. Performance Summary - Accomplishments:

	FY 1997	FY 1998	FY 1999
Nuclear Materials Stabilization (cont'd)			
The Uranium Disposition Project supports activities to remove plutonium (Pu) contamination from stored enriched uranium (eU) hemishells to permit off-site shipment and acceptance by Oak Ridge Y-12; remove residual highly enriched uranyl nitrate (HEUN) by removing the Raschig rings in the tanks from Rocky Flats; and to continue HEUN conversion to highly enriched uranium (HEU) oxide off-site. [RF-011]	$ 11,158	$ 1,897	$ 0
• In FY 1997: - Completed installation of electro-decontamination equipment; decontaminated 50 percent of the Pu-contaminated eU hemishells; and finished off-site shipment of HEUN-contaminated Raschig rings from Building 886 ($0.99M funded by Defense Programs in FY 1997). • In FY 1998: - Decontaminate the remaining Pu-contaminated HEU hemishells to complete the Uranium Disposition Project. • In FY 1999: - No activity.			
Construction of a new Interim Plutonium Storage Facility was curtailed. Conceptual design was completed in FY 1997. [RF-007] • In FY 1997, completed conceptual design work. • In FY 1998, no activity. • In FY 1999, no activity.	$ 1,627	$ 0	$ 0
Subtotal, Nuclear Materials Stabilization	**$ 82,164**	**$115,511**	**$123,716**

III. Performance Summary - Accomplishments:

	FY 1997	FY 1998	FY 1999
Landlord			
Surveillance and Maintenance (S&M) is a major element of the Building Cluster Closure Projects at Rocky Flats. This scope includes core activities that ensure buildings within a cluster are operated and maintained in a safe, secure, and environmentally compliant status. The core activities include compliance surveillance, maintenance, operations technical support, operations management, and authorization basis maintenance and revision. There are 686 facilities and structures at Rocky Flats that require different levels of S&M. This scope represents the total site S&M requirements for all building clusters inside the Nuclear Production Zone and the Industrial Area. [Portions of RF-014 through RF-022]	$107,854	$116,231	$ 94,445

- In FY 1997, surveillance and maintenance included:
  - Audits, inspections, assessments, and the tracking and documentation of surveillance to comply with the authorization basis, radiological controls, and state and Federal environmental regulations.
  - Preventive and corrective maintenance of all facility equipment and calibration of meters, gauges, and instruments.
  - Operations Technical Support provided technical expertise in health and safety, radiological control technicians, radiological engineering, industrial hygienists, emergency preparedness, and nuclear safety.
  - Operations Management provided oversight and control of the utilities/ventilation systems to control radioactive material and associated contamination safely. Other activities included occurrence reporting, commitments tracking, chemical tracking, and spill response.
  - Authorization Basis Maintenance and Revision provided controls for hazards associated with building operations and the storage of material. These activities included developing and maintaining safety analysis reports, basis for operations, and basis for interim operations documents.

III. Performance Summary - Accomplishments:

	FY 1997	FY 1998	FY 1999
Landlord (cont'd)			
• In FY 1998, continue surveillance and maintenance activities. Increased level of S&M is commensurate with the initiation and increase in levels of deactivation, decommissioning and waste activities across the site.			
• In FY 1999, continue surveillance and maintenance activities at a reduced level due to deactivation and decommissioning accomplishments.			
The Utilities and Infrastructure Project provides the resources necessary to maintain the physical plant infrastructure. This includes activities which produce and distribute utilities (electricity, water, steam, natural gas, and inert gases) for use throughout the site. Other services include cafeteria food services, metrology laboratories, emergency preparedness, logistics services, fire protection and prevention, laundry operations, and filter services. Support services provide for the direct support of closure operations through property removal and disposal, transportation support, fire alarms systems maintenance, and fire systems inspection and maintenance. [RF-023]	$ 48,131	$ 50,076	$ 51,775
• In FY 1997, provided utility and infrastructure support.			
• In FY 1998, continue utility and infrastructure support.			
• In FY 1999, continue utility and infrastructure support (increase due to increased level of stabilization, deactivation, and decommissioning activities).			
The Safeguards and Security (S&S) Project provides for the physical protection, control and accountability of Special Nuclear Material and classified matter at Rocky Flats. This project supports site-wide S&S program management, and the planning resources necessary to develop and implement the site Safeguards and Security Plan and associated security/emergency response plans. Protective program operational activities including armed protective force, special response team, physical security system alarm response and maintenance, access control, and property			

III. Performance Summary - Accomplishments:

	FY 1997	FY 1998	FY 1999
Landlord (cont'd)			
protection personnel and capabilities are also supported by this project. In addition, it includes SNM control and accountability activities which assure secure and accurate measurement, reporting, and intra-site transportation of material drive these funding requirements. Internal security responsibilities, including contractor security investigations, personnel security assurance programs, classified information management and control, and computer/communications/and technical security are addressed by this project. [RF-024]	$ 8,864	$ 47,105	$ 50,462

- In FY 1997:
  - Provided Safeguards and Security for site-wide operations.
- In FY 1998:
  - Continue to provide Safeguards and Security for increased levels of nuclear material stabilization, SNM consolidation, SNM shipping, and deactivation activities.
- In FY 1999:
  - Continue to provide Safeguards and Security for increased levels of nuclear material stabilization, SNM consolidation, SNM shipping, and deactivation activities.
  - EM assumes responsibility for contractor security investigations ($635,258).

The Infrastructure Improvement/Replacement Project includes a number of subprojects whose purpose is to maintain the infrastructure at the site and provide for safe and secure operations during site closure. These subprojects were some of the traditional line-item construction projects and include: Infrastructure Capital Equipment subproject that provides upgrades for improved operational efficiencies to support downsizing of facilities; Underground Storage Tank (UST) subproject that replaces 22 underground fuel storage tanks to comply with 40 CFR 280 and

III. Performance Summary - Accomplishments:

	FY 1997	FY 1998	FY 1999
Landlord (cont'd)			
Colorado Compliance Regulation 7 CCR 1101-14; Health Physics/Representative Effluent Samplers subproject to replace effluent record samplers; Air Monitoring Improvement (AMI) subproject to replace Selective Alpha Air Monitors; Plant Fire/Security System Replacement (PF/SR) subproject to replace the primary fire and security alarm systems in certain facilities; and the Criticality Alarms and Plant Annunciation System Upgrade (CAPASU) subproject to replace the obsolete and non-compliant Life Safety/Disaster Warning (LS/DW) system in plutonium buildings. [RF-025]	$ 0	$ 28,284	$ 25,847

- In FY 1997:
  - The Firing Range Bullet Trap, Decontamination Trailer, and Live Fire Shoot House subprojects were completed. In addition, CAPASU Phase A construction was completed. Prior year funds were utilized to support these activities.
- In FY 1998:
  - The UST subproject will complete project close-out, complete Effluent Sampler installation and testing, Building 371 Selective Alpha Air Monitor installation, and Phase 1 of the Security System installation.
- In FY 1999:
  - Complete the Central Alarm Station Upgrade (PF/SR subproject) and the CAPASU Phase B construction.

The Analytical Services Project provides sampling and analytical chemistry services in support of site operations and closure activities. Analytical services satisfy the requirements of federal, state, and local agencies for characterization of environmental contamination, facility waste, environmental monitoring, industrial hygiene, radiological health, medical monitoring, nuclear material processing and stabilization, and nuclear material control and accountability. [RF-027]	$ 12,827	$ 4,635	$ 4,707

III. Performance Summary - Accomplishments:

	FY 1997	FY 1998	FY 1999
Landlord (cont'd)			
• In FY 1997: - Provided site-wide analytical services. • In FY 1998: - Certain analytical services have been out-sourced and the programs are now responsible for program specific services. • In FY 1999: - Continue to provide site-wide analytical services.			
The Rocky Flats Field Office (RFFO) Program Support Project provides for the RFFO management of the Integrating Management Contract (IMC) for the conduct of all site activities, including developing and monitoring of IMC performance measures, program execution guidance, Operational Readiness Reviews, facility representatives, the life cycle baseline, budget management, prioritization, updates to the FY 2006 Plan, and conduct of the Emergency Management Program. It also provides activities which support the Rocky Flats Cleanup Agreement (RFCA), other Congressionally mandated programs (i.e., Technology Development, Health Studies, Worker Community Transition, etc.), legal expenses relating to the continuing class actions and other civil litigation activities of former site management and operations contractors under the "litigation and claims" clause of those contracts, and financial assistance to the State of Colorado. [RF-029]	$ 34,888	$ 31,964	$ 27,000
• In FY 1997: - Provided RFFO Program Support. • In FY 1998: - Provide RFFO Program Support with decreases anticipated in litigation support costs. • In FY 1999: - Continue to provide RFFO Program Support with even further anticipated decreases for litigation support costs.			

III. Performance Summary - Accomplishments:

	FY 1997	FY 1998	FY 1999
Landlord (cont'd)			
The Kaiser-Hill Project Management Project comprises all of the necessary Integrating Management Contractor support, direction and management for the Rocky Flats Site. This management and support are integral to the safe and efficient execution of work required to achieve accelerated cleanup and risk reduction at Rocky Flats. Much of this support and management will diminish significantly as plutonium operations are curtailed; however, in most areas, some effort will be required until all decommissioning, waste, and remediation activities are complete. [RF-030]			
Kaiser-Hill provides planning and integration services that support the entire site by developing, implementing, and monitoring the progress of strategic plans to close Rocky Flats; assisting in the identification of performance measures; guiding the development of the annual work plan; setting standards for site-wide business practices, cost estimating and scheduling; creating and maintaining the Integrated Site-wide Baseline; maintaining project controls systems; and conducting monthly program/ site activity reviews. Kaiser-Hill also provides performance oversight including nuclear performance assurance (PA), which demonstrates the readiness to conduct nuclear activities prior to actual operations; Price-Anderson Amendment Act compliance; and interfacing with the site's nuclear regulatory agencies such as the Defense Nuclear Facilities Safety Board and staff. The IMC provides programmatic management for all nuclear operations, environmental remediation, and waste activities. The IMC also provides the general management and oversight for all site expense funded projects.	$ 35,294	$ 38,596	$ 38,960

- In FY 1997:
  - Provided planning and integration, performance oversight, and programmatic management for site-wide operations.

III. Performance Summary - Accomplishments:

	FY 1997	FY 1998	FY 1999
Landlord (cont'd)			
• In FY 1998: - Continue planning and integration, performance oversight and programmatic management for site-wide operations at a higher level of effort due to increased levels of stabilization, decommissioning, and waste activities. • In FY 1999: - Continue planning and integration, performance oversight and programmatic management for site-wide operations comparable to FY 1998 levels.			
The IMC provides the Safety and Industrial Hygiene Program to support other projects in complying with Federal regulations; the Independent Management Assessment Program, the Corrective Action and Cause Analysis programs under the Price-Anderson Amendment Act; and the Site Standards Management Program. The contractor also provides a wide range of engineering and technical support services to include: procurement engineering; facilities configuration management; technology integration; engineering assessments; engineering standards maintenance; and design document control. Kaiser-Hill establishes program parameters for site nuclear engineering, radiation protection, and infrastructure processes that support the technical and administrative integration and maintenance of the Site Authorization Basis during design, construction, maintenance, modification and decommissioning activities. Includes oversight of fire protection engineering, nuclear criticality safety, nuclear engineering assessments, and engineering documents management.	$ 42,122	$ 46,064	$ 42,936
• In FY 1997: - Provided Safety Systems, Site Engineering Standards Systems, and Oversight of Site Nuclear Engineering and Radiation Protection Program support.			

III. Performance Summary - Accomplishments:

	FY 1997	FY 1998	FY 1999
Landlord (cont'd)			
• In FY 1998: - Continue to provide Safety Systems, Site Engineering Standards Systems, and Oversight of Site Nuclear Engineering and Radiation Protection Program support for increased stabilization and decommissioning activities. • In FY 1999: - Provide Safety Systems, Site Engineering Standards Systems, and Oversight of Site Nuclear Engineering and Radiation Protection Program support based on curtailment of some stabilization activities at the end of FY 1999.			
Provide for a range of record services for both classified and unclassified records, including turnover and storage of inactive records, research and retrieval from on-site and off-site storage facilities, substantial support in ongoing discovery efforts for litigation, and the management of 4,500 cubic feet of classified records. Provide for effluent air, ambient air, and meteorological monitoring; air permitting and compliance; fee payments associated with permitting; and document review. Also provides for annual updates to the Historical Release Report and CERCLA Administrative Record, safe drinking water certification, National Environmental Policy Act (NEPA) reviews and reports, Site Treatment Plan implementation, and administration of the Environmental Institute agreement with the Colorado School of Mines. The contractor provides a liaison function with the Rocky Flats Local Impacts Initiative (RFLII) and the local Community Reuse Organization (CRO). This scope also includes legacy costs, retiree benefits, and contractor insurance fees.	$ 41,379	$ 45,251	$ 43,913
• In FY 1997: - Provided all Records Management and Document Control, Environmental Compliance, and Economic Conversion support. Included payments for legacy costs, retiree benefits, and insurance fees.			

III. Performance Summary - Accomplishments:

	FY 1997	FY 1998	FY 1999
Landlord (cont'd)			
• In FY 1998:			
- Continue to provide support for Records Management and Document Control, Environmental Compliance, and Economic Conversion at an increased level to support deactivation and decommissioning planning and execution activities. Include payments for legacy costs, retiree benefits, and insurance fees.			
• In FY 1999:			
- Continue to provide support for Records Management and Document Control, Environmental Compliance, and Economic Conversion at a level reflecting a slight decrease in decommissioning activities for FY 1999. Also, reflects an Anticipated reduction in litigation costs. Include payments for legacy costs, retiree benefits, and insurance fees.			
Subtotal, Landlord	**$331,359**	**$408,206**	**$380,045**

Waste Activities:

The Waste Management Project includes all activities that support the treatment, storage, and disposal of all wastes currently in the inventory and projected to be generated from other site closure projects. Specific waste types include: low-level waste (LLW), mixed low-level waste (MLLW), transuranic (TRU) waste, transuranic mixed (TRM) waste, hazardous waste, and other sanitary/uncontaminated waste. The scope of the project includes safe and compliant management on-site, in new and existing storage facilities; safe and compliant treatment, including construction of liquid waste treatment upgrade, of mixed wastes at on-site and off-site locations; and safe and compliant disposal at approved off-site repositories. The metrics below detail the cubic meters (m^3) of waste disposed off-site. [RF-002]

SITE CLOSURE - DEFENSE - ROCKY FLATS (cont'd)

III. Performance Summary - Accomplishments:

	FY 1997	FY 1998	FY 1999
Transuranic Waste	$ 8,816	$ 12,905	$ 14,259

Storage
- In FY 1997, stored 1,505 m^3 of TRU waste on-site.
- In FY 1998, store 2,268 m^3 of TRU waste on-site.
- In FY 1999, store 3,372 m^3 of TRU waste on-site.

Treatment
- In FY 1997, no TRU waste was treated.
- In FY 1998, treat 31 m^3 of TRU waste.
- In FY 1999, treat 428 m^3 of TRU waste.

Disposal
- In FY 1997, there were no shipments off-site, however, 450 drums were pre-certified for disposal at the Waste Isolation Pilot Plant.
- In FY 1998, 126 m^3 (1.4 percent) out of 8,728 m^3 will be shipped to WIPP.
- In FY 1999, 1,000 m^3 (11.4 percent) out of 8,728 m^3 will be shipped to WIPP.

Subtotal, Transuranic Waste	**$ 8,816**	**$ 12,905**	**$ 14,259**

III. Performance Summary - Accomplishments:

	FY 1997	FY 1998	FY 1999
Mixed Low-Level Waste (MLLW)	$ 17,086	$ 40,585	$ 46,066

Storage
- In FY 1997, stored 17,145 m^3 of MLLW on-site.
- In FY 1998, store 13,207 m^3 of MLLW on-site.
- In FY 1999, store 9,278 m^3 of MLLW on-site.

Treatment
- In FY 1997, 1,705 m^3 of MLLW were treated off-site.
- In FY 1998, 4,173 m^3 of MLLW will be treated off-site.
- In FY 1999, 4,103 m^3 of MLLW will be treated off-site.

Disposal
- In FY 1997, 2,564 m^3 (3.1 percent) of 82,056 m^3 of LLMW were shipped off-site.
- In FY 1998, 4,173 m^3 (5.1 percent) of 82,056 m^3 of LLMW will be shipped off-site. (17 shipments)
- In FY 1999, 4,147 m^3 (5.1 percent) of 82,056 m^3 of LLMW will be shipped off-site. (140 shipments)

Subtotal, Mixed Low-Level Waste	**$ 17,086**	**$ 40,585**	**$ 46,066**

III. Performance Summary - Accomplishments:

	FY 1997	FY 1998	FY 1999
Low-Level Waste (LLW)	$ 8,325	$ 12,918	$ 18,521

Storage
- In FY 1997, stored 7121 m^3 of LLW on-site.
- In FY 1998, store 8631 m^3 of LLW on-site.
- In FY 1999, store 4767 m^3 of LLW on-site.

Treatment
- No LLW treatment.

Disposal
- In FY 1997, 1,288 m^3 (1.9 percent) of 68,310 m^3 of LLW were shipped off-site.
- In FY 1998, 2,945 m^3 (4.3 percent) of 68,310 m^3 of LLW will be shipped off-site.
- In FY 1999, 6,288 m^3 (9.2 percent) of 68,310 m^3 of LLW will be shipped off-site.

Subtotal, Low-Level Waste	**$ 8,325**	**$ 12,918**	**$ 18,521**

SITE CLOSURE - DEFENSE - ROCKY FLATS (cont'd)

III. Performance Summary - Accomplishments:

	FY 1997	FY 1998	FY 1999
Hazardous Waste	$ 223	$ 331	$ 553
Disposal • In FY 1997, 347 m^3 (12.5 percent) of 2,781 m^3 of waste were shipped off-site. • In FY 1998, 322 m^3 (11.6 percent) of 2,781 m^3 of waste will be shipped off-site. • In FY 1999, 88 m^3 (3.2 percent) of 2,781 m^3 of waste will be shipped off-site.			
Subtotal, Hazardous Waste	**$ 223**	**$ 331**	**$ 553**
Other Waste (including sanitary waste)	$ 5,528	$ 6,411	$ 6,308
Disposal • In FY 1997, 9,873 m^3 (5.8 percent) of 169,805 m^3 were shipped for disposal. • In FY 1998, 9,461 m^3 (5.6 percent) of 169,805 m^3 will be shipped off-site. • In FY 1999, 11,200 m^3 (6.6 percent) of 169,805 m^3 will be shipped off-site.			
Subtotal, Other Waste	**$ 5,528**	**$ 6,411**	**$ 6,308**
TOTAL, ROCKY FLATS	**$487,385**	**$632,100**	**$625,200**

Explanation of Funding Changes from FY 1998 to FY 1999

Remedial Action/Release Sites: Increase is due to additional work scope required in FY 1999 to remediate 7 release sites.	$ +811
Facility Decommissioning: Decrease is due to completion of decommissioning of Building 123 and the majority of decommissioning work in the Building 779 Cluster accomplished in FY 1998.	$ -2,129
Facilities Deactivation: Increase is due to additional deactivation activities being initiated in the Building 776/777 Cluster and the Building 444 Cluster.	$ +1,817
Nuclear Materials Stabilization: (+8,205)	
Decrease is due to completion of plutonium liquid stabilization activities in Building 771 in FY 1998.	$ -3,163
Increase is due to additional residue stabilization work in FY 1999 for salt pyro-oxidation and incinerator ash stabilization.	$+18,982
Increase is due to full time operation of the Plutonium Stabilization and Packaging System in FY 1999.	$ +3,469
Decrease is due to reduction in number of Special Nuclear Material shipments in FY 1999 (40) compared to FY 1998 (60). Shipments to Pantex are completed in FY 1999.	$ -3,346
Decrease is due to completion of residue and waste removal from Building 771 Annex and Stacker/Retriever maintenance upgrades in FY 1998.	$ -948

Explanation of Funding Changes from FY 1998 to FY 1999 (cont'd)

Nuclear Materials Stabilization: (cont'd)

Decrease is due to completion of the majority of safety upgrades in FY 1998.	$ -4,867
Decrease is due to improvements in inspection operations and training required.	$ -25
Decrease is due to completion of Uranium Disposition Project in FY 1998.	$ -1,897

Landlord: ($-28,161)

Decrease is due to reduced levels of surveillance and maintenance from previous year's deactivation and decommissioning activities.	$ -21,786
Increase is due to increase levels of infrastructure/utilities needed to support residue stabilization activities, deactivation, and decommissioning cleanup activities site-wide.	$ +1,699
Increase is due to assumed responsibility by EM for contractor clearance investigation costs ($632,258) and increase in site-wide Safeguards and Security program management ($2,724,742).	$ +3,357
Decrease is due to completion of the Underground Storage Tank Project in FY 1998.	$ -2,437
Increase is due to normal annual escalation for site-wide analytical costs support.	$ +72
Decrease is due to anticipated reduction in litigation support costs by the Rocky Flats Field Office.	$ -4,964

Explanation of Funding Changes from FY 1998 to FY 1999 (cont'd)

Landlord: (cont'd)

Increase is due to normal annual escalation based on comparable activities from previous year.	$ +364
Decrease is due to curtailment of some nuclear stabilization activities at the end of FY 1999 (Plutonium Liquid Project consolidation into Building 371 and project scheduled to be completed by end of FY 1999).	$ -3,128
Decrease is due to anticipated reduction in litigation support costs, records management costs, and economic conversion support.	$ -1,338
Transuranic Waste: Increase is due to increased level of TRU waste shipments off-site to WIPP.	$ +1,354
Mixed Low-Level Waste: Increase is due to increased levels of packaging and preparation activities for FY 2000 MLLW shipments. Started construction activities for the Liquid Waste Treatment Upgrade subproject in FY 1998.	$ +5,481
Low-Level Waste: Increase is due to increased quantity of LLW shipped off-site.	$ +5,603
Hazardous Waste: Increase is due to additional activities required to support FY 2000 decommissioning activities.	$ +222
Other Waste: Decrease is due to normal annual efficiencies identified by the contractor.	$ -103
Total Funding Change, Rocky Flats	**$ -6,900**

DEPARTMENT OF ENERGY
FY 1999 CONGRESSIONAL DATA SHEET
DEFENSE FACILITIES CLOSURE PROJECTS
(Tabular dollars in thousands. Narrative material in whole dollars.)

1. Title and Location of Project: Waste Pits Remedial Action; Fernald, Ohio	2a. Project No: **98 CLR 3** 2b. Operating Expense Funded
3a. Date A-E Work Initiated, (Title I Design Start Scheduled): n/a 3b. A-E Work (Titles I & II) Duration: n/a 3c. Request for Proposal Issue Date: January 1997 3d. Contract Award: October 1997	5. Previous Cost Estimate: Total Estimated Cost (TEC) -- **$30,200** Total Project Cost (TPC) -- **$160,400**
4a. Date Physical Construction Starts: July 1998 4b. Date Construction Ends: TBD 4c. First Scheduled Delivery: March 1999 4d. Projected End Date: May 2005	6. Current Cost Estimate: a/ TEC -- **$23,614 b/** TPC -- **$193,712 c/**

7. Financial Schedule (Federal Funds)

Fiscal Year	Appropriation	Contract Commitments d/	Capital Outlays
1998	25,000	**23,614**	0
1999	0	0	**6,195**
2000	0	0	**8,709**
2001	0	0	**8,710**
2002	0	0	0
2003	0	0	0
2004	0	0	0

This Project was Congressionally moved to the Defense Facilities Closure Projects Appropriation and future funding for the project will be requested under that appropriation.

a/ These estimates are preliminary. Conceptual designs have not been completed and may affect the final estimates.
b/ The Total Estimated Cost as defined here is the value DOE has established for the capital investment by the private sector. It is the basis for the Capital Investment B/A Request.

1. Title and Location of Project:	Waste Pits Remedial Action; Fernald, Ohio	2a. Project No.: 98 CLR 3 2b. Operating Expense Funded

7. Financial Schedule (Federal Funds)(contd:)

c/ The Total Project Cost as defined here is the combined value DOE believes will be necessary to pay for the products or services contractually agreed upon plus other support costs. It includes B/A requests for capital investment (TEC); EM base program requests for direct payments to the vendor; and $71.62 million M&O support for long-term D&D.

d/ Includes current contractor investment plus funds to maintain current project schedules (including allowances for items such as long-lead procurements). The difference between the contract commitments of $23.614 million and the $25.0 million appropriated is to cover contingencies.

1. Title and Location of Project:	Waste Pits Remedial Action; Fernald, Ohio	2a. Project No.: 98 CLR 3 2b. Operating Expense Funded

8. Project Description, Justification and Scope

The scope of work for this remediation project includes the excavation, processing, treatment (thermal drying), and load out, for on-site disposal and off-site shipment and disposal, of approximately 1,000,000 tons of low-level radioactive waste. The 1,000,000 tons is comprised of 910,000 tons from eight waste pits and 90,000 tons other operable units. Initially, this project was for only 750,000 tons from the eight waste pits. However, the scope was expanded to include the 160,000 tons of sub-surface soils from the eight waste pits so a single contractor would be responsible for the final cleanup. It was also decided to include the soil from other operable units since it had similar contamination. The contractor will dry the soil and prepare it for shipment either to the on-site disposal cell or off-site. The capital portion of the project decreased, but the operating portion of the cost increased due to the increased volumes. The subcontractor must perform all planning and design activities, mobilization, construction, start-up, operations, decontamination and decommissioning, site restoration, and demobilization in conformance with the performance-based specification. The waste material in the pits was generated from various chemical and metallurgical processes used at the facility to produce uranium and thorium metal products from 1952 through 1987 and has been characterized through Agency-approved Remedial Investigations under the CERCLA process. The relative technical complexity of this project is considered to be low.

The Remedial Investigations for the waste pits indicate that the pits contain approximately 6,200 metric tons of uranium and 244 metric tons of thorium. The pits are lined with native clay or synthetic liners and are approximately 20 to 30 feet deep. Analytical data indicates that the pits are contributing contamination to the underlying Great Miami Aquifer. The waste pits are considered the second most significant source of contamination at the site.

The Remedial Investigations Feasibility Study (FS), and Proposed Remedial Action Work have been completed and approved by the all relevant agencies. The U.S. Environmental Protection Agency (EPA) signed the Record of Decision stipulating the above referenced excavation, processing, treatment, and off-site disposal of this material on March 1, 1995. The subsequent Remedial Action Work Plan for this project established the following enforceable milestones: start waste processing by March 1, 1999; and complete waste processing by May 31, 2005. The U.S. EPA and Ohio EPA will provide continuing oversight throughout the entire project. FY 1997 activities included preparation and release of the RFP an the evaluation and selection process leading up to contract award in October.

1. Title and Location of Project:	Waste Pits Remedial Action; Fernald, Ohio	2a. Project No: 98 CLR 3 2b. Operating Expense

Funded

8. Project Description, Justification and Scope (contd.)

Future budget requests will be made within the Defense Facilities Closure Projects Appropriation for the purpose of making payments to the vendor for the contractually required service or product.

9. Details of Cost Estimate

Total capital cost is anticipated to be $23.6 million.

10. Method of Performance

This project is a performance-based specification where the vendor shall produce a thermally-dried waste product which meets the waste acceptance criteria of the selected permitted disposal facility when loaded into a gondola railcar. Additionally, the railcar shall meet all Department of Transportation and Federal Rail Act (FRA) requirements for off-site shipment of the waste.

The site's Environmental Restoration contractor (Fluor Daniel Fernald (FDF)) is responsible for the coordination of the transportation of the vendor's product to a permitted commercial disposal facility. The FDF will supply the vendor with empty gondola railcars. Due to existing union agreements and current interpretation of DOE Orders, FDF will also supply the vendor with site labor forces and radiological control personnel. On-site infrastructure (rail and processing support facilities) and off-site transportation improvements are in-progress and will be completed by December 1997. The successful completion of this project is directly linked to the site's current draft 2006 Plan, which states that a beneficial end point for the site will be achieved by the year 2005.

1. Title and Location of Project: Waste Pits Remedial Action; Fernald, Ohio

2a. Project No: 98 CLR 3

2b. Operating Expense Funded

10. Method of Performance

The vendor will be required to produce a specified quantifiable end product on a fixed-price basis. Payments shall be based on a unit price for tons of processed and treated waste loaded into railcars ready for disposal.

Construction and equipment to be utilized by the contractor and the performance of work will be financed up front by the contractor, with the associated cost recovered through unit pricing for the contract specified production rates of the end product, thus transferring project performance risks to the contractor.

11. Schedule of Project Funding and Other Related Funding Requirements:

	Prior Years	FY1997	FY1998	FY1999	Outyears	Total
Total Facility Costs- Payments to Vendor	$0	$0	$0	$6,195	$17,419	$23,614
Other Project Costs						
Facility Operations - payments to vendor	0	0	0	10,427	88,051	98,478
Facility support - M&O support/Other	0	0	3,000	9,000	59,620	71,620
Sub-total other project cost	0	0	3,000	19,427	147,671	170,098
TOTAL	$0	$0	$3,000	$25,622	$165,090	$193,712

12. Government Approach

This approach is expected to lead to cost savings/ avoidance of approximately $30 million compared to the government cost estimate.

DEPARTMENT OF ENERGY
FY 1999 CONGRESSIONAL DATA SHEET
DEFENSE FACILITIES CLOSURE PROJECTS
(Tabular dollars in thousands. Narrative material in whole dollars.)

1. Title and Location of Project: Fernald Environmental Management Project, Operable Unit 4,Silo 3 Residue Waste Treatment; Fernald, Ohio	2a.Project No: **98 CLR 4** 2b.Operating Expense Funded
3a. Date A-E Work Initiated, (Title I Design Start Scheduled): n/a 3b. A-E Work (Titles I & II) Duration: n/a 3c.Request for Proposal Issue Date: June, 1998 3d.Contract Award: September 30, 1998	5.Previous Cost Estimate: Total Estimated Cost (TEC) -- n/a Total Project Cost (TPC) -- n/a
4a.Date Physical Construction Starts: 2nd Qtr FY 1999 4b.Date Construction Ends: TBD 4c.First Scheduled Delivery: 3rd Qtr FY 2000 4d.Project End Date: 3rd Qtr FY 2001	6. Current Cost Estimate:a/ TEC -- $10,900b/ TPC -- $23,900c/

7. Financial Schedule (Federal Funds)

Fiscal Year	Appropriation	Contract Commitments d/	Capital Outlays
1998	$ 6,700	$6,700	$ 0
1999	0	0	0
2000	4,200	4,200	3,700
2001	0	0	5,500
2002	0	0	1,700

This Project was Congressionally moved to the Defense Facilities Closure Projects Appropriation and future funding for the project will be requested under that appropriation.

a/ These estimates are preliminary. Conceptual designs have not been completed and may affect the final estimates.

b/ The Total Estimated Cost as defined here is the value DOE has established for the capital investment by the private sector. It is the basis for the Capital Investment Privatization B/A Request.

1. Title and Location of Project:	Fernald Environmental Management Project, Operable Unit 4, Silo 3 Residue Waste Treatment; Fernald, Ohio	2a. Project No: **98 CLR 4** 2b. Operating Expense Funded

7. Financial Schedule (Federal Funds)(contd:)

c/ The Total Project Cost as defined here is the combined value DOE believes will be necessary to pay for the products or services contractually agreed upon plus other support costs. It includes B/A requests for capital investment (TEC); EM base program request for direct payments to the vendor; and $3.5 million M&O support.

d/ Includes current contractor investment plus funds to maintain current project schedules (including allowances for items such as long-lead procurements).

1. Title and Location of Project:	Fernald Environmental Management Project, Operable Unit 4, Silo 3 Residue Waste Treatment; Fernald, Ohio	2a. Project No: **98 CLR 4** 2b. Operating Expense Funded

8. Project Description, Justification and Scope

The scope of work for this project includes the retrieval, transfer, treatment (stabilization/solidification), packaging, transportation, and disposal of approximately 5,100 cubic yards of powdery, thorium-bearing residues from an above-grade, concrete storage silo at the Fernald Environmental Management Project (FEMP). The material in the silo was generated from the processing of uranium ores which contained Thorium from 1952 through 1957. The relative technical complexity of this project is considered to be low except for the material handling aspects.

The remedial investigation for Silo 3 indicates that the silo contains powdery residues containing approximately 450 curies of Thorium-230 and 40 curies of uranium. Silo 3 contains appreciable quantities of Radium 226. The Silo 3 residues exceed the toxicity characteristic limits for arsenic, cadmium, chromium, and selenium but are exempt from regulation under RCRA due to the classification as 11 (2) byproduct material under the Atomic Energy Act. Silo 3 was constructed of reinforced concrete in 1951 through 1952. Silo 3 is 80 feet in diameter, 36 feet high to the center of the silo dome, and 26 feet tall to the top of the vertical side walls.

The vendor for this project shall produce a stabilized/solidified waste product, which is packaged, transported and disposed at the Nevada Test Site or a permitted commercial disposal facility. It is anticipated that the vendor will design and construct the necessary facilities and equipment to achieve the end product.

The site's environmental restoration contractor, Fluor Daniel-Fernald (FDF), is responsible for the oversight and coordination of the subcontractor's product. The FDF will supply the vendor with utilities that are currently available at the site. Due to existing union agreements and current interpretation of DOE Orders, FDF will also supply the subcontractor site labor forces and radiological control personnel. The successful completion of this project is directly linked to the site's current Ten-Year Plan and Consent Agreement Milestones currently under renegotiation with the U.S. Environmental Protection Agency (EPA).

1. Title and Location of Project:	Fernald Environmental Management Project, Operable Unit 4, Silo 3 Residue Waste Treatment; Fernald, Ohio	2a. Project No: **98 CLR 4** 2b. Operating Expense Funded

8. Project Description, Justification and Scope (contd.):

The approved "Record of Decision for Remedial Actions at Operable Unit 4, December 1994," is currently being modified to revise the selected remedy for the Silo 3 residues from vitrification to stabilization/solidification. In addition, the disposal facility option has been expanded from only the Nevada Test Site to include a permitted commercial disposal facility. Several project milestones associated with the Silo 3 residues are currently under renegotiation with the U.S. EPA as enforceable milestones. An Agreement with EPA (March 26, 1997) to proceed with Explanation of Significant Difference (ESD) will allow implementation of the Silo 3 project.

The FY 1998 funding request of $10.9 million is for the purpose of awarding a contract. These funds will also cover the remote possibility of termination of the contract. They will eventually be used to reimburse capital expenditures after services commence.

Future budget requests for $9.5 million will be made within the Defense Facilities Closure Projects Appropriation, for the purpose of making payments to the vendor for the contractually required service or product. An additional $3.5 million from the same appropriation will provide for support of the closure effort.

9. Details of Cost Estimate

Total capital cost is anticipated to be $10.9 million. Detailed estimates are under development.

1. Title and Location of Project: Fernald Environmental Management Project, Operable Unit 4, Silo 3 Residue Waste Treatment; Fernald, Ohio	2a. Project No: **98 CLR 4** 2b. Operating Expense Funded

10. Method of Performance

This project will be procured through competitive fixed-price procurement upon release of the Request for Proposal (RFP) to pre-qualified vendors for proposals the third quarter of FY 1998.

The vendor will be required to produce a specified, quantifiable, end-product on a fixed price bases for treatment of 5,100 cubic yards of waste for disposal at an off-site disposal facility. The vendor is responsible for reprocessing out-of-spec material at the vendor's expense. Construction and equipment to be utilized by the vendor in the performance of work will be financed up-front by the vendor.

The vendor's costs are recovered through unit pricing for the contract-specified production rates of the end product, thus transferring a portion of the project performance risks to the contractor.

11. Schedule of Project Funding and Other Related Funding Requirements

	Prior Years	FY1997	FY1998	FY1999	Outyears	Total
Total facility costs - payments to vendors	$0	$0	$0	$0	$10,900	$10,900
Other project costs:						
Facility operations - payments to vendors	0	0	0	0	9,500	9,500
Facility support - M&O support/other	0	0	100	200	3,200	3,500
Sub-total other project costs	0	0	100	200	12,700	13,000
TOTAL	$0	$0	$100	$200	$23,600	$23,900

12. Government Approach

This approach is expected to lead to cost savings/avoidance of approximately $30.0 million compared to the government cost estimate.